

Philadelphia University	 PHILADELPHIA UNIVERSITY <small>THE WAY TO THE FUTURE</small>	Approval date: 8-10-2025
Faculty: Allied medical sciences		Issue:
Department: Physiotherapy		Credit hours: 1
Academic year 2025/2026		Bachelor

Course information

Course#	Course title	Co /Pre-requisite
1120224	Physiotherapy and Electrical Therapy Clinical	--
Equivalent 1120271	Equivalent Electro physical agents Lab	
Course type		Class time
<input type="checkbox"/> University Requirement <input type="checkbox"/> Faculty Requirement <input checked="" type="checkbox"/> Major Requirement <input type="checkbox"/> Elective <input type="checkbox"/> Compulsory		Sunday: 2:15—4:00
		Room # lab

Instructor Information

Name	Office No.	Phone No.	Office Hours	E-mail
<i>Assistant Professor Dr.asmaa atwa</i>	09-15409	2465	Sat (10:15-11:15) Sun (10:15-13:15) Tuesday(10:15-12:15)	atwaa@philadelphia.edu.jo

Course Delivery Method

Course Delivery Method			
<input checked="" type="checkbox"/> Physical	<input type="checkbox"/> Online	<input type="checkbox"/> Blended	
Learning Model			
Precentage	Synchronous	Asynchronous	Physical
			100%

Course Description

This course will emphasize the practical application of electro physical agents and hydrotherapy. Introduction to Basic Concept of electro physical modalities, Heating modalities, Infrared Therapy (IR), Low Level Laser Therapy (LASER) Ultraviolet therapy, Shortwave diathermy (SWD), Microwave diathermy (MWD), Ultrasound Therapy (US), Shock wave Therapy. Principles of hydrotherapy, Whirlpool and contrast bath, Physiological effects of hydrotherapy, Aquatic therapy, principles benefits and uses, Hydrotherapy in selected disorders, Thermotherapy, hydro-collator and paraffin wax, Mud and Peloids, Physiological effects of cold, Cryotherapy, Fluid therapy and Heat versus cold. Introduction to Basic Concept of electrical stimulation, Mechanism of action of electrical stimulation, Low Frequency current: Faradic current, TENS, HVPGS, Diadynamic current, Russian Current, Interferential Current, Direct Current (Iontophoresis), Micro Currents, Electro diagnosis and Biofeedback.

Course Learning Outcome

	Number	Outcomes	Corresponding Program outcomes
Knowledge			
1	K1	describe different types of electro physical agents and their characteristics	Kp1
2	K2	Recognize the basic principles, indications, contraindications, precautions, methods of application and safety issues of different types of electro physical agents.	Kp1
3	K3	Justify the selection of types of electro physical agents based on patient/ client condition and the treatment area	Kp2
4	K4	Explain the principles of tissue impedance and the impact on the current flow	Kp1
Skills			
5	S1	Apply different electrotherapy and hydrotherapy modalities in accordance with standard guidelines and safety precautions	Sp1
6	S2	Demonstrate evidence –based practice to support treatment intervention using electro physical and thermal agents	Sp3
Competences			
7	C1	Design a treatment plan for a patient /client using electro physical agents based on to assessment outcome	Cp2

Learning Resources

Course textbook	-watsonT.and Nussbaum E.L (2021) electro physical agents: evidence based practice.13 th edition .Elsevier
Supporting websites	<ul style="list-style-type: none"> - American Physical Therapy Association (APTA): http://www.apta.org/ - Chartered Society of Physiotherapy: http://www.csp.org.uk/
Supporting references	<ul style="list-style-type: none"> - Michael A. Pagliarulo (2020) Introduction to Physical Therapy (6thed) - Robertson V.Ward,lowj.l.and reed A.electrotherapy explained principles and practice .4th edition .butterworth-heineman
Teaching Environment	<input type="checkbox"/> Classroom <input checked="" type="checkbox"/> laboratory <input type="checkbox"/> Learning platform <input type="checkbox"/> Other

Meetings and subjects timetable

Week	Topic	Learning Methods	Tasks	Learning Material
1	Hot packs / Infrared	Lab discussion	Mid	Text book
2	CRYOTHERAPY	Lab Case scenarios	Mid	Text book
3	Paraffin wax	Lab Case scenarios	Mid Quiz1 (9/11/2024)	Text book
4	SHORT WAVE DIATHERMY Quiz 1	Mid exam	Mid exam	Text book
5	ULTRASOUND	Lab Case scenarios	Final	Text book
6	Traction	Lab Case scenarios	Final	Text book
7	Midterm	Exam	Exam	All previous topics unless cryotherapy
8	Shock Wave Therapy	Lab discussion	Final	Text book
9	Electrotherapy modality	Lab discussion	Final	Text book
10	Electrotherapy modality2	Lab discussion	Final Quiz2 (30/12/2024)	Text book
11	laser Therapy	Lab Case scenarios	Final	Text book
12	Bio feed back Quiz 2	Final exam	Final exam	All previous topics
13	Ultraviolet	Lab Case scenarios	Final	Text book
14	Iontophoresis	Lab Case scenarios	Final	Text book
15	Revision	Lab Case scenarios	Final	Text book
16	Final exam			

* includes: Lecture, flipped Class, project- based learning, problem solving based learning, collaborative learning

Course Contributing to Learner Skill Development

Using Technology
Use data-bases and platforms effectively to support evidence based knowledge and practice
Communication skills
Self-reflection, friendliness, confidence, empathy, respect, responsiveness, morality. Students will be introduced to communicate with patient regarding outcomes and therapeutic program
Application of concepts learnt
Apply leadership and lifelong learning skills. Students will be introduced to interpretation and integration of finding from multiple sources.

Assessment Methods and Grade Distribution

Assessment Methods	Grade Weight	Assessment Time (Week No.)	Link to Course Outcomes
Mid Term Exam	% 30	4th week	K1,K2,K3,K4
Various Assessments *: Quiz 1 Quiz 2 assignment	% 30	In each lab we will have a quiz randomly (for each student 3 quizzes)	S1,S2,C1
Final Exam	% 40	12th week	K1,K2,K3,K4,S1,S2 andC1
Total	%100		

* includes: quiz, in class and out of class assignment,

Alignment of Course Outcomes with Learning and Assessment Methods

Number	Learning Outcomes	Learning Method*	Assessment Method**
Knowledge			
K1	describe different types of electro physical agents and their characteristics	Lab Case scenarios	Quiz and exams
K2	Recognize the basic principles, indications, contraindications, precautions, methods of application and safety issues of different types of electro physical agents.	Lab Case scenarios	Quiz and exams
K3	Justify the selection of types of electro physical agents based on patient/ client condition and the treatment area	Lab discussion Case scenarios	Quiz and exams
K4	Explain the principles of tissue impedance and the impact on the current flow	Lab discussion Case scenarios	Quiz and exams
Skills			
S1	Apply different electrotherapy and hydrotherapy modalities in accordance with standard guide lines and safety precautions.	Lab Case scenarios	Quiz and exams
S2	Demonstrate evidence –based practice to support treatment interventions using electro physical and thermal agents	Lab Case scenarios	Quiz and exams
Competencies			
C1	Design a treatment plan for a patient/client using electro physical agents based on to assessment outcomes.	Lab Case scenarios	Quiz and exams

* includes: Lecture, flipped Class, project- based learning, problem solving based learning, collaborative learning

** includes: quiz, in class and out of class assignment

Course Policies

Policy	Policy Requirements
Passing Grade	The minimum passing grade for the course is (50%) and the minimum final mark recorded on transcript is (35%).
Missing Exams	<ul style="list-style-type: none"> Missing an exam without a valid excuse will result in a zero grade to be assigned to the exam or assessment. A Student who misses an exam or scheduled assessment, for a legitimate reason, must submit an official written excuse within a week from the exam or assessment due date. A student who has an excuse for missing a final exam should submit the excuse to the dean within three days of the missed exam date.
Attendance	The student is not allowed to be absent more than (15%) of the total hours prescribed for the course, which equates to six lectures days (M, W) and seven lectures (S, T, R). If the student misses more than (15%) of the total hours prescribed for the course without a satisfactory excuse accepted by the dean of the faculty, s/he will be prohibited from taking the final exam and the grade in that course is considered (zero), but if the absence is due

	to illness or a compulsive excuse accepted by the dean of the college, then withdrawal grade will be recorded.
Academic Honesty	Philadelphia University pays special attention to the issue of academic integrity, and the penalties stipulated in the university's instructions are applied to those who are proven to have committed an act that violates academic integrity, such as: cheating, plagiarism (academic theft), collusion, and violating intellectual property rights.

Program Learning Outcomes to be assessed in this Course

Number	Learning Outcome	Course Title	Assessment Method	Target Performance level
KP1	Demonstrate profound and contemporary knowledge in basic, clinical, medical, and psychosocial sciences relevant to the practice of physical therapy.	Electro physical agents	Exam, quizzes	80% of students will get 60% or above of exam marks
Kp2	Integrate knowledge and skills gained in basic, clinical, medical and behavioral sciences and .apply them into patient care	Electro physical agents	Exam, quizzes	80% of students will get 60% or above of exam marks
Sp1	Demonstrate competent entry-level skills and abilities to critically reason in terms of screening, evaluation, re-evaluation, diagnosis, prognosis, and development of a plan of care for clients and patients seeking physical therapy services.	Electro physical agents	Quiz and exams and	80% of students will get 60% or above of exam marks
Sp3	Adhere to legal, ethical, and safe physical therapy practice that respects human dignity, culture, and diversity within a global society	Electro physical agents	Quiz and exams	80% of students will get 60% or above of exam marks
Cp2	Demonstrate competence in accessing, appraising, and implementing evidence-based literature to enhance physical .therapy care delivery	Electro physical agents	Quiz and exams	80% of students will get 60% or above of exam marks

Description of Program Learning Outcome Assessment Method

Number	Detailed Description of Assessment
Kp1	Quizzes and exams.
Kp2	Quizzes and exams
Sp1	Quiz and exams
Sp2	Quiz and exams
Cp1	Quiz and exams