


Philadelphia University	 PHILADELPHIA UNIVERSITY <small>THE WAY TO THE FUTURE</small>	Approval date: 20/10/2022
Faculty: Allied Medical Sciences		
Department: Physical Therapy		Credit hours: 2
Academic year 2022/2023	Course Syllabus	Bachelor

Course information

Course#	Course title	Co /Pre-requisite
1120223	Electrophysical Agents	1120122 + 0211109
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		Room #
		Mon - Wed 11.15 – 12.15
		9315

Instructor Information

Name	Office No.	Phone No.	Office Hours	E-mail
Prof. Fuad Abdulla	0915307	2326	Sunday: 9.30 – 11.00 Monday: 8.15 – 9.45 Tuesday: 12.30 – 2.00 Wednesday: 9.30 – 11.00	fabdulla@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 acquaints students with the principles of electrophysical agents and hydrotherapy in the field of rehabilitation. For each modality studied the followings will be discussed: physiological and therapeutic effects, indications, contraindications, precautions, and safety issues. Moreover, methods of applications of each modality will be discussed emphasizing clinical skills, and treatment planning based on patient/ client condition.

Course Learning Outcomes

	Number	Outcomes	Corresponding Program outcomes
Knowledge			
1	K1	Describe different types of electrophysical agents and their characteristics.	Kp2
2	K2	Recognize the basic principles, indications, contraindications, precautions, methods of applications and safety issues of different types of therapeutic exercises.	Kp2
3	K3	Justify the selection of types of electrophysical agents based on patient/ client condition and the treatment area.	Kp1
4	K4	Explain the principles of tissue impedance and the impact on current flow.	Kp2
Skills			
5	S1	Apply different electrotherapy and hydrotherapy modalities in accordance with standard guidelines and safety precautions.	Sp2
	S2	Demonstrate evidence-based practice to support treatment interventions using electrophysical and thermal agents.	Sp2
Competencies			
7	C1	Design a treatment plan for a patient/ client using electrophysical agents based on to assessment outcomes.	Cp1

Learning Resources

Course textbook	Watson T. and Nussbaum E.L. (2021) Electrophysical Agents: Evidence-based Practice. 13th edition. Elsevier.
Supporting References	Robertson V., Ward A., Low J.L. and Reed A. Electrotherapy Explained principles and practice. 4 th edition. Butterworth-Heinemann
Supporting websites	American Physical Therapy Association APTA
Teaching Environment	<input checked="" type="checkbox"/> Classroom <input type="checkbox"/> laboratory <input checked="" type="checkbox"/> Learning platform <input type="checkbox"/> Other

Meetings and subjects timetable

Week	Topic	Learning Methods	Learning Material
1	Introduction to Electrophysical Agents	Lecture Discussion	Chapter 1
2	Heat modalities	Lecture Discussion	Chapter 5 and 6
3	Heat modalities	Lecture Case Scenarios	Chapter 7 and 8
4	Quize-1		Chapter 3

	Paraffin wax	Lecture	
5	Hydrotherapy	Lecture Case Scenarios	Reading
6	Ultrasound	Lecture Case Scenarios	Chapter 9
7	Laser Therapy	Lecture	Chapter 10
8	Midterm Exam Revision	Lecture Case Scenarios	Chapter 6
9	Traction	Lecture Discussion	Reading
10	Shock waves	Lecture Discussion	Chapter 13
11	Electrical stimulation therapy	Lecture Case Scenarios	Chapter 15 and 16
12	Electrical stimulation therapy	Lecture	Chapter 17 and 18
13	Quiz-2 Electrical stimulation therapy	Lecture Case Scenarios	Chapter 19
14	Low frequency pulsed electromagnetic fields	Lecture Case Scenarios	Chapter 12
15	Microwave diathermy Ultraviolet irradiation	Lecture Case Scenarios	Chapter 11 and Reading
16	Final Examination		

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

Course Contributing to Learner Skill Development

Using Technology
Students will be introduced to navigating and reading professional websites.
Communication skills
Students will be introduced to communicate with patient/client regarding assessment outcomes and therapeutic program
Application of concepts learnt
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%	8 th week	K1, K2, K3, K4
Various Assessments *	30%	Overall course duration	S1, S2, C1
Final Exam	% 40	16 th week	K1, K2, K3, K4, S1, S2 and C1

Total	%100		
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* includes: quiz, in class and out of class assignment, presentations, reports, videotaped assignment, group or individual projects.

Alignment of Course Outcomes with Learning and Assessment Methods

Number	Learning Outcomes	Learning Method*	Assessment Method**
Knowledge			
K1	Describe different types of electrophysical agents and their characteristics.	Lecture, case scenarios	Exam and quizzes
K2	Recognize the basic principles, indications, contraindications, precautions, methods of applications and safety issues of different types of therapeutic exercises.	Lecture, case scenarios	Exam and quizzes
K3	Justify the selection of types of electrophysical agents based on patient/client condition and the treatment area.	Lecture, Discussion, case scenarios	Exam and quizzes
K4	Explain the principles of tissue impedance and the impact on current flow.	Lecture, Discussion, case scenarios	Exam and quizzes
Skills			
S1	Apply different electrotherapy and hydrotherapy modalities in accordance with standard guidelines and safety precautions.	Lecture, case scenarios	Exam, quizzes, and assignment
S2	Demonstrate evidence-based practice to support treatment interventions using electrophysical and thermal agents.	Lecture, case scenarios	Exam, quizzes, and assignment
Competencies			
C1	Design a treatment plan for a patient/client using electrophysical agents based on to assessment outcomes.	Lecture, case scenarios	Exam, quizzes, and assignment

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

** includes: quiz, in class and out of class assignment, presentations, reports, videotaped assignment, group or individual projects.

Assignment

Each student will select one of the electrophysical agents discussed in the course and write a 500-word paper about the clinical uses of the selected electrophysical agent. **Assignment is due January 03, 2023.**

Course Polices

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 4.5 hours of lectures days (Sun, Tus). 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, she/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	The program will graduate students able recognize the role of physiotherapy in the context of the health needs of the community and national priorities in the health sector	Electrophysical Agents	Exams, Quizzes	75% of students will get 60% or more of the total score
Kp2	The program will graduate students able to acquire knowledge in basic medical sciences, various medical conditions, and surgical treatments, and determine their impact on the individual and society.	Electrophysical Agents	Exams, Quizzes	75% of students will get 60% or more of the total score
Sp2	The program will graduate students able to perform a safe, systematic, and appropriate assessment and intervention for different physiotherapy circumstances.	Electrophysical Agents	Exams, Quizzes, Assignment	75% of students will get 60% or more of the total score
Cp1	The program will implement clinical reasoning, reflection, decision-making, and skillful application of physiotherapy	Electrophysical Agents	Exams, Quizzes, Assignment	75% of students will get 60% or more of the total score

	techniques to deliver optimum physiotherapy management			
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Description of Program Learning Outcome Assessment Method

Number	Detailed Description of Assessment
Kp1	Short exams will be done on 1st year by clinical practice
Kp2	Short exams will be done on 1st year by clinical practice
Sp1	Short exams will be done on 1st year by clinical practice
Cp1	Short exams will be done on 1st year by clinical practice