Philadelphia University		**Approval date:**
Faculty: Allied Medical Sciences		
Department: Physical Therapy		**Credit hours: 2**
Academic year 2022/2023	**Course Syllabus**	**Bachelor Degree Program**

Course information

Course#	Course title	Pre-requisite/co-requisite*	
1120220	**Musculoskeletal Evaluation**	***Musculoskeletal Anatomy (1120111)** **Introduction to Physiotherapy (1120122)**	
Course type		**Class time**	**Room #**
☐ University Requirement ☐ Faculty Requirement ☐ Major Requirement ☐ Elective ☒ Compulsory		**Mon: 9.45am-10.45am** **Wed: 9.45am – 10.45am**	**411**

Instructor Information

Name	Office No.	Phone No.	Office Hours	E-mail
Dr. J. Madhanagopal	**15409**	**0785302488**	**Sun: 11.15am-1.15pm** **Mon: 2pm-4pm** **Wed: 11.15am-1.15pm**	**mjagannathan@philadelphia.edu.jo**

Course Delivery Method

Course Delivery Method			
☒ **Physical**	☐ **Online**	☐ **Blended**	
Learning Model			
Precentage	**Synchronous**	**Asynchronous**	**Physical**
			100%

Course Description

This course is designed to impart the basic musculoskeletal assessment knowledge to students in the context of physical therapy. The assessment covers history taking, skills of observation, palpation, range of motion (ROM) measurement, end feel, and muscle strength testing. This course also covers the basic Subjective, Objective, Assessment and Plan (SOAP) format for the better understanding of the assessment.

Course Learning Outcomes

	Number	Outcomes	Corresponding Program outcomes
	Knowledge		
1	**K2**	Describe the subjective and objective musculoskeletal assessment using the SOAP format	**KP2**
2	**K4**	Illustrate the examination procedure of observation, palpation, range of motion, muscle strength testing using relevant scales and devices	**KP2**
	Skills		
1	**S3**	Reproduce the subjective examination using SOAP assessment format	**SP2**
2	**S3**	Demonstrate the procedure of observation, palpation, range of motion, muscle strength testing using relevant scales and devices	**SP2**
	Competencies		

Learning Resources

Course textbook	**Musculoskeletal Assessment: Range of motion, muscle testing and function. Hazel M. Clarkson, 4th edition; 2020; ISBN-13: 978-1975112424**
Supporting References	**Physical Rehabilitation: Susan B. O Sullivan, Thomas J. Schmitz, George D. Fulk, 7th edition, ISBN-13: 978-0803661622**
Supporting websites	www.ebesco.com
Teaching Environment	☒**Classroom** ☒ **laboratory** ☐**Learning platform** ☐**Other**

Meetings and subjects timetable

Week	Topic	Learning Methods	Learning Material
1	**Course syllabus, Vision, Mission, Aim and LO of the Program** **Introduction to musculoskeletal assessment** Overview SOAP Assessment format	Lecture	**Vision, Mission, Aim and LO of the Program** **Supporting References Chapter 4**
2	**Subjective examination** History taking	Lecture	**Supporting References Chapter 4**
3	**Objective examination**	Lecture and	**Text Book Chapter 1**

	Observation Local General	Problem solving based learning	**Supporting References Chapter 4**
4	Palpation End feel	Lecture and Problem solving based learning	**Text Book Chapter 1 Supporting References Chapter 4**
5	Range of motion measurement Overview of measurement devices including indications and contraindications Shoulder , and Elbow	Lecture and Problem solving based learning	**Text book Chapter 1, 3 & 4**
6	Range of motion measurement Radio ulnar, Wrist and hand	Lecture and Problem solving based learning	**Text book Chapter 4 &5**
7	Range of motion measurement Hip and Knee	Lecture and Problem solving based learning	**Text book Chapter 6 & 7**
8	Range of motion measurement Hip and Knee	Lecture and Problem solving based learning	**Text book Chapter 6& 7**
9	Range of motion measurement Ankle and toes	Lecture and Problem solving based learning	**Text book Chapter 8**
10	Range of Motion measurement Cervical Lumbar Spine	Lecture and Problem solving based learning	**Text book Chapter 9**
11	**Muscle strength testing** Overview of assessment scales and devices including indications and contraindications Shoulder	Lecture and Problem solving based learning	**Text book Chapter 1 & 3**
12	**Muscle strength testing** Elbow, wrist and intrinsic muscles of hand	Lecture and Problem solving based learning	**Text book Chapter 4 & 5**

13	**Muscle strength testing** Hip	Lecture and Problem solving based learning	**Text book Chapter 6**
14	**Muscle strength testing** Knee and Ankle	Lecture and Problem solving based learning	**Text book Chapter 7& 8**
15	**Muscle strength testing** Spine	Lecture and Problem solving based learning	**Text book Chapter 9**
16	**Final Exam**		

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

☐ Online session

Course Contributing to Learner Skill Development

Using Technology
Learnt evidence based assessment tools/devices in this course will develop their critical thinking and problem solving skills
Communication skills
Develops interpersonal skills while interacting with the patients/simulator
Application of concepts learnt
Applies the learnt concepts of subjective and objection examination procedures while assessing the patients/simulator

Assessment Methods and Grade Distribution

Assessment Methods	Grade Weight	Assessment Time (Week No.)	Link to Course Outcomes
Midterm exam	**30%**	**7**	**K2**
Term work **Assignment 1** **Assignment 2** **Assignment 3**	**30%**	**5** **10** **14**	**S3** **S2** **S2**
Final Exam	**40%**	**16**	**K4**
Total	**100%**		

* 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			
K2	Describe the subjective and objective musculoskeletal assessment using the SOAP format	Lecture	**Exam**
K4	Illustrate the examination procedure of observation, palpation, range of motion, muscle strength testing using relevant scales and devices	Lecture	**Exam**
Skills			
S3	Reproduce the subjective examination using SOAP assessment format	Problem solving based learning	**Assignment**
S2	Show the examination of observation, palpation, range of motion, muscle strength testing using relevant scales and devices	Problem solving based learning	**Assignment**
Competencies			

* 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.

Course Polices

Policy	Policy Requirements
Passing Grade	The minimum pass for the course is (50%) and the minimum final mark is (35%).
Missing Exams	• Anyone absent from a declared semester exam without a sick or compulsive excuse accepted by the dean of the college that proposes the course, a zero mark shall be placed on that exam and calculated in his final mark. • Anyone absent from a declared semester exam with a sick or compulsive excuse accepted by the dean of the college that proposes the course must submit proof of his excuse within a week from the date of the excuse's disappearance, and in this case, the subject teacher must hold a compensation exam for the student. • Anyone absent from a final exam with a sick excuse or a compulsive excuse accepted by the dean of the college that proposes the material must submit proof of his excuse within three days from the date of holding that exam.
Attendance	The student is not allowed to be absent more than (15%) of the total hours prescribed for the course, which equates to six lecture days and seven lectures (days). If the student misses more than (15%) of the total hours prescribed for the course without a satisfactory or compulsive excuse

	accepted by the dean of the faculty, he is prohibited from taking the final exam and his result in that subject is considered (zero), but if the absence is due to illness or a compulsive excuse accepted by the dean of the college that may be considered. The article is introduced, it is considered withdrawn from that article, and the provisions of withdrawal shall apply to it.
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, intellectual property rights

Program Learning Outcomes to be assessed in this Course

Number	Learning Outcome	Course Title	Assessment Method	Target Performance level
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.	**Musculoskeletal Evaluation**	**Theory Exam**	75% of students have a minimum score 6 out of 10
SP2	The program will graduate students able to perform a safe, systematic and appropriate assessment and intervention for different physiotherapy circumstances	**Musculoskeletal Evaluation**	**Assignment**	75% of students have a minimum score 6 out of 10

Description of Program Learning Outcome Assessment Method

Number	Detailed Description of Assessment
KP2	This intended program learning outcome (IPLO) will be assessed by theory exam: MCQ and Essay questions
SP2	This IPLO will be assessed by using out of class Assignment. The following rubrics will be used to evaluate the students skills

Assignment Rubrics

	Criteria	Weak (0-3)	Average (4-6)	Satisfactory (7-9)	Competent (10-12)	Score
1	**Identify the main issue/ problem**	Unable to identify issue/problem in complex situations. Uncertain and unable to assess adequately.	Able to identify an issue/problem in a complex situation but less able to assess adequately.	Able to identify a problem with clarity but moderately able to assess and justify the situation.	Able to identify issue/ problem in a complex situation and able to assess and justify the situation.	___ x 2
2	**Analysis of the issue/problem**	Unable to analyze issue/problem in complex situations and uncertain and unable to assess adequately.	Able to analyze issue/ problem in a complex situation but less able to assess adequately.	Able to analyze issue/problem with clarity but moderately able to assess and justify the situation.	Able to analyze issue/problem in a complex situation and able to assess and justify the situation.	___ x 2
3	**Relevance**	No relevance	Sufficient relevance	Good relevance	Excellent relevance	___ x 2
4	**Information management**	Poorly updated the information and lack of correlation	Minimum updated information and needs improvement	Adequate updated information lack of correlation	High correlation of information with current trends and advances	___ x 1
5	**Plagiarism**	More than 80%	Between 40-80%	Between 20-40%	Less than 20 %	___ x 1
6	**List of references**	Fails to use the references in a correct way	Partially fulfill the required number of references	fulfill and appropriate use of references	exceed the required number of references	___ x 1