

## COURSE SPECIFICATION (OLD PLAN)

1435-36



## Physical Therapy Course Plan

Code	Course Name	Credits	Code	Course Name	Credits
<b>Level - 1 / Semester - 1 (Preparatory Year)</b>			<b>Level - 2 / Semester - 2 (Preparatory Year)</b>		
ENGL 131	English: Listening & Speaking	2	BIOL 106	General Biology	4
ENGL 132	English: Reading	2	CHEM 105	General Chemistry for Health Sciences	2
ENGL 133	English: Writing	2	CHEM 106	Organic Chemistry for Health Sciences	2
CT 140	IT Skills	3	PHYS 106	General Physics	4
ISLM 101	Introduction to Islamic Culture	2	ENGL 134	English for Health Sciences	3
ARAB 101	Language Skills	2		Total	15
PSSC114	Learning Skills and Communication	2	<b>Level - 4 / Semester - 4</b>		
	Total	15	RHPT 241	Measurements in Physical therapy	3
<b>Level - 3 / Semester - 3</b>			RHPT 242	Human Anatomy	3
CAMS 231	Human Anatomy and Physiology	4	RHPT 243	Human Physiology	2
CAMS 232	Math for Health Sciences	2	RHPT 244	Electrotherapy-1	3
CAMS 233	Medical Terminology	2	RHPT 245	Introduction to Biomechanics	2
CAMS 234	Emergency Healthcare	2	RHPT 246	Therapeutic Exercise-1	3
CAMS 235	Introduction to Pathology	2			
ISLM 102	Islam and the Construction of Society	2		Total	16
ARAB 103	Expository Writing	2	<b>Level - 6 / Semester - 6</b>		
	Total	16	RHPT 361	Pathophysiology	2
<b>Level - 5 / Semester - 5</b>			RHPT 362	Hydrotherapy	3
RHPT 451	Neuroanatomy	3	RHPT 363	Medical Massage	2
RHPT 452	Therapeutic Exercise-2	3	RHPT 364	Physical Therapy for Pediatrics	3
RHPT 453	Electrotherapy-2	3	RHPT 365	Pharmacology	2
RHPT 454	Neurophysiology	3	RHPT 366	Traumatology	2
RHPT 455	Human Biomechanics	3	ISLM 104	Fundamentals of Islamic Politics	2
ISLM 103	The Islamic Economic	2		Total	16
			<b>Level - 8 / Semester - 8</b>		
	Total	17	RHPT 481	Physical Therapy for Respiratory Disorders	3
<b>Level - 7 / Semester - 7</b>			RHPT 482	Physical Therapy for Cardiovascular Disorders	3
RHPT 471	Orthotics and Prosthetics	2	RHPT 483	Geriatric Rehabilitation	3
RHPT 472	Physical Therapy for Neurological Disorders	3	RHPT 484	Advanced Physical Therapy Procedures	3
RHPT 473	Rehabilitation Psychology	2	RHPT 485	Reading in Medical Imaging	3
RHPT 474	Clinical Practice in Pediatrics	2		Total	15
RHPT 475	Physical Therapy for Orthopedics and Rheumatology	3	<b>Level - 9 / Semester - 9</b>		
RHPT 476	Physical Therapy for Burn and Surgical Conditions	3	RHPT 491	Management of Physical Therapy Services	2
	Total	15	RHPT 492	Occupational Therapy	3
<b>Internship</b>			RHPT 493	Clinical Practice	2
<b>Non credit 1 year of supervised Clinical Internship. (08:00 to 04:00 PM, 5 Days for 52 Weeks)</b>			RHPT 494	Selected Clinical Topics	2
			RHPT 495	Research Methodology	2
			RHPT 496	Patient Care	2
			RHPT 497	Independent study	2
				Total	15



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**Measurement in Physical Therapy  
PHT 223 & RHPT 241**

## Course Specifications

Institution: Majmaah University	Date of Report: 1435-1436 2 <sup>nd</sup> semester (18/1/2015)
College/Department : College of Applied Medical Sciences / Department of Physical Therapy & Health Rehabilitation	

### A. Course Identification and General Information

1. Course title and code: Measurement in Physical therapy & PHT 223 (RHPT 241 Old Plan)			
2. Credit hours: 3 hours			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Physical therapy program			
4. Name of faculty member responsible for the course Course Coordinator : <b>Mr. Hariraja Muthusamy</b> (Section:859,860,861,862) Course Instructors : <b>Ms. Nivedita.P.Kashyap</b> (Section:255,256,275)			
5. Level/year at which this course is offered: Level 4 / 2 nd year			
6. Pre-requisites for this course (if any): PHT 212			
7. Co-requisites for this course (if any): PHT 212			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text" value="NA"/>
c. E-learning	<input type="checkbox"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="checkbox"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="checkbox"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course?
Upon completion of the course, students should have a clear understanding of the following:
1. Different measuring tools, scales and various methods of evaluation of joint mobility, muscle power and posture.
2. Outline methods for using goniometry to assess range of motion and muscle length during patient evaluation.
3. Perform longitudinal and girth measurements for the spine and extremities. Apply the proper way of testing mobility and strength for the spine and extremities.
4. Student should be able to independently take goniometric measurement of all the joints as well as can assess the strength of all the muscles
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
1. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)
2. Students will be encouraged to do the following:
a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
1. Fundamental concepts and principles of Manual muscle testing. Concepts and procedures of goniometric measurement.	1	05
2. Reliability ,validity and objectivity techniques of evaluation of grading system		
3. Innervation, Joint movement, Assessment of Range of Motion and Strength of Scapular Muscles.	1	05
4. Innervation, joint movement ,assessment of Range of motion & strength of Shoulder joint muscles	1	05

5. Innervation, joint movement ,assessment of Range of motion & Strength of Elbow joint muscles	1	05
6. Innervation, joint movement ,assessment of Range of motion & Strength of Wrist joint muscles	2	10
<b>In course examination 1 (Mid Term Exam – Theory)</b>		
7. Innervation, joint movement ,assessment of Range of motion & Strength of Finger joint muscles	1	05
8. Innervation, joint movement , assessment of Range of motion & Strength of Hip joint muscles	1	05
9. Innervation, joint movement , assessment of Range of motion & Strength of Knee joint muscles	1	05
10. Innervation, joint movement , assessment of Range of motion & Strength of Ankle joint muscles	2	10
<b>In course examination 2 (Mid Term Exam – Theory)</b>		
11. Assessment of Strength and Range of motion of Spinal muscles	2	10
12. Assessment of Chest wall expansion & Limb length Discrepancies	1	05
13. Abdominal muscle assessment	1	05
<b>Final practical examination</b>		



3. Additional private study/learning hours expected for students per week.	5 hrs
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.







<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct



Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam – Theory	6	10%
2	First Midterm exam – Practical	7	15%
3	Second Midterm exam – Theory	13	10%
4	Second Midterm exam – Practical	14	15%
5	Log book	14	10%
6	Final exam – Practical	15	20%
7	Final exam – Theory	16	20%



2. Computing resources (AV, data show, Smart Board, software, etc.) One computer in the classroom, and another in the lab. Projector. (In both classroom and lab) Smart board. (In both classroom and lab) Data show. (In both classroom and lab)
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> <li>Asking question before, during and after each lecture</li> <li>Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor <ul style="list-style-type: none"> <li>Frequent feedback from the students &amp; clarification of doubts now &amp; then Feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff</li> </ul>
3 Processes for Improvement of Teaching <ul style="list-style-type: none"> <li>Attending frequent workshops</li> <li>Efficient &amp; effective use of teaching methods Easy &amp; illustrative examples</li> </ul>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) <ul style="list-style-type: none"> <li>Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</li> <li>Matrix – Mapping Peer review / department council committee review</li> </ul>

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Continuous evaluation of the students during the term, and frequent updating of the course content

**Faculty or Teaching Staff:** 1. Mr. Hariraja Muthusamy (Boys Section) &  
2. Mrs. Nivedita P.Kashyap (Girls Section)

**Signature of teaching faculty:** \_\_\_\_\_ **Date of the report completed:** \_\_\_\_\_

**Course Coordinator: Mr. Hariraja Muthusamy Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad, HOD**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Human Anatomy  
RHPT 242**

**Course Specifications  
(CS)**



## Course Specifications

Institution	<b>Majmaah University</b>	Date of Report: 31/8/2014
College/Department: <b>Applied Medical Sciences / Physical Therapy &amp; Health rehabilitation</b>		

### A. Course Identification and General Information

1. Course title and code: <b>Human Anatomy - RHPT 242</b>			
2. Credit hours: <b>2</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Physical Therapy &amp; Health rehabilitation</b>			
4. Name of faculty member responsible for the course: <b>Dr. Mohamed Seyam.</b> <b>Ms. Asmaa Naseem</b>			
5. Level/year at which this course is offered : <b>3<sup>rd</sup> level</b>			
6. Pre-requisites for this course (if any): <b>NA</b>			
7. Co-requisites for this course (if any): <b>NA</b>			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="0%"/>
c. E-learning	<input type="checkbox"/>	What percentage?	<input type="text" value="0%"/>
d. Correspondence	<input type="checkbox"/>	What percentage?	<input type="text" value="0%"/>
f. Other	<input type="checkbox"/>	What percentage?	<input type="text" value="0%"/>
Comments:			

## B Objectives

1. What is the main purpose for this course? <p><b>The focus of the course is on the correct use of anatomical terminology, identify relevant anatomical features, and understand the topographical relationships of anatomical structures and discussion of the basic structure and function of the major components of each body system.</b></p>
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g.

increased use of IT or web based reference material, changes in content as a result of new research in the field)

1. The Lectures should also be a part of updating their knowledge through continuous medical education (CME), periodically in rotational basis.
2. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc).
3. Students will be encouraged to do the following:
  - a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
  - b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.

**C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)**

This is an introductory course in systemic gross anatomy specific to further study in physiotherapy. Structures of the integumentary, musculoskeletal, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, and urogenital will be examined

CONTENTS OF THE COURSE		
Topics	No. of Weeks	Contact hours
<b>Cells and tissues:</b> <ul style="list-style-type: none"> <li>Anatomical Nomenclature,</li> <li>Structure of Cell, Reproduction of Cells.</li> <li>Tissues: Epithelial, Connective, Muscle &amp; Nervous</li> </ul>	02	06
<b>Embryology &amp; development:</b> <ul style="list-style-type: none"> <li>Early Human Development,</li> <li>Development of Individual Systems: Respiratory, gastro-intestinal, Urinary and Vascular System.</li> <li>Prenatal Growth in Form And Size,</li> <li>Neonatal Anatomy and Growth.</li> </ul>	02	06
<b>Integumentary system</b> <ul style="list-style-type: none"> <li>Types of Skin, Epidermis, Dermis, Nerves, Blood Vessels,</li> <li>Age related Change and Repair.</li> <li>Appendages of Skin: Pilo sebaceous Unit, Nail Unit.</li> </ul>	02	06
<b>In course examination 1 (Mid Term Exam – Theory &amp; Practical)</b>	Week 6	

<b>Muscles:</b> <ul style="list-style-type: none"> <li>• Types of Muscle,</li> <li>• Attachments of Skeletal Muscle,</li> <li>• Form and Function in Skeletal,</li> <li>• Muscle: Form and Fibre Architecture,</li> <li>• Functional Implications of Form.</li> <li>• Muscle and Movement.</li> <li>• Muscles and Fasciae of Head, Neck, Trunk, Upper Limb, Lower Limb</li> </ul>	02	06
<b>Hemolymphoid and cardiovascular system:</b> <ul style="list-style-type: none"> <li>• haemal cells and tissue.</li> <li>• Haemopoiesis</li> <li>• Lymphoid cells and tissues.</li> <li>• Blood vessels</li> <li>• Thoracic cavity and heart.</li> <li>• Arterial, venous, lymphatic system.</li> </ul>	02	06
<b>In course examination 2 (Mid Term Exam – Theory &amp; Practical)</b>	Week 12	
<b>Respiratory system:</b> <ul style="list-style-type: none"> <li>• Nose and Para nasal sinuses</li> <li>• Larynx</li> <li>• Trachea, bronchi and lungs</li> <li>• pleura</li> <li>• Mediastinum</li> </ul>	02	06
<b>Alimentary system:</b> <ul style="list-style-type: none"> <li>• Oral cavity</li> <li>• Abdomen</li> <li>• Oesophagus to anus</li> </ul>	02	06
<b>Final Practical examination</b>	Week 15	
<b>Final Theory examination</b>	Week 16	

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	15	NA	30	NA	NA	45
Credit	1	NA	1	NA	NA	2



3. Additional private study/learning hours expected for students per week.

2

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. Normally a course has **should not exceed eight learning outcomes** which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

**Suggested assessment methods and teaching strategies are:**

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First midterm theoretical exam	6	10%
2	First midterm practical exam	6	10%
3	Second midterm theoretical exam	12	10%
4	Second midterm practical exam	12	10%
5	Theoretical quizzes	3 – 14	10%
6	Logbook	6-12-15	10%
7	Final term theoretical exam	16	20%
8	Final term practical exam	17	20%





2. Computing resources (AV, data show, Smart Board, software, etc.)
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

### G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
3 Processes for Improvement of Teaching
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)



5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

**Faculty or Teaching Staff:**

Dr. Mohamed Seyam (male section)  
Ms. Asmaa nassem (female section)

**Signature:**

**Date Report Completed:**

**Received by:**

\_\_\_\_\_  
**Dean/Department Head**

**Signature:** \_\_\_\_\_

**Date:**

## ATTACHMENT 2 (e)

### Course Specifications

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

### Course Specifications (CS)

## Course Specifications

Institution: College of Applied Medical Sciences	Date of Report: 01/02/1435H
College/Department: Physical Therapy and Rehabilitation	

### A. Course Identification and General Information

1. Course title and code: Human Physiology RHPT243			
2. Credit hours: 2 Hours (Theory 2 hour+ Practical 1 Hours)			
3. Program(s) in which the course is offered: Physical Therapy and Rehabilitation (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course: Dr. Moattar Raza Rizvi			
5. Level/year at which this course is offered: Level 4/2 <sup>nd</sup> Year			
6. Pre-requisites for this course (if any):			
7. Co-requisites for this course (if any):			
8. Location if not on main campus: Not Applicable			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100"/>
b. Blended (traditional and online)	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="0"/>
c. e-learning	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="0"/>
d. Correspondence	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="0"/>
f. Other	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="0"/>
<p>Comments:</p> <p>Apart from all the above listed mode of instruction, continuous monitoring and supervision of weak student is being done so as to boost them to perform well.</p>			

## B Objectives

<p>1. What is the main purpose for this course?</p> <p>This course involves a detailed study of the physiology of the various systems of the body at a microscopic and macroscopic level, with a particular emphasis on the musculoskeletal, neurological and cardiopulmonary systems. The student should be able to describe the structure and function of the various system of the body as they relate to Physiotherapy. The course aim to This course provides physiotherapy students with an opportunity to develop an understanding of the functions and needs of mammalian tissues, organs and systems as a basis to : Optimize physical well being, Interpret data indicating disturbed function and Solve problems for management of disturbed function. The course covers general and specialised cell physiology, including nerve and muscle cells and systematic physiology of the cardiovascular, respiratory and renal systems.</p>
<p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <ul style="list-style-type: none"> <li>• Annual review of course by departmental course planning committee.</li> <li>• Updating the course with latest developments in the field.</li> <li>• Annual review and updating practical sessions with new experiments, slides and new preparations.</li> <li>• Updating course resources using internet materials.</li> <li>• Comparison of course topics with equivalent local and international courses.</li> </ul>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
Functional Systems of Cell: Cell and its Function, Extra-Cellular Fluid, Intra-Cellular Fluid, Functional Systems of Cell, DNA, RNA.	1	1
<b>Homeostasis:</b> Definition, Negative and Positive Feedback Mechanism, Body Temperatures: Skin and core temperatures, Mechanisms of heat production and heat loss, Regulation of body temperature. Hypothermia and hyperthermia, Heat disorders	1	1

Membrane Physiologies, Nerve and Muscle: Transport of Substances Through the Cell Membrane: diffusion, Active Transport, Membrane Potentials and Action Potentials: Resting Membrane Potential of Nerves, Nerve Action Potential, Propagation of AP, Signal Transmission in Nerve Trunks, Contraction of Skeletal Muscle: Molecular Mechanics of Muscle Contraction, Energetics of Muscle Contraction, Characteristics of Whole Muscle Contraction, N-M Junction, Muscle AP, Excitation- Contraction Coupling.	2	2
Heart and Circulation: Cardiac Muscle, Cardiac Cycle, Regulation of Heart Pumping, Cardiac Failure. Rhythmical Excitation of the Heart: Specialized Excitatory and Conductive System of the Heart, Control of Excitation and Conduction in the Heart. Heart Sounds, Interrelationships among Pressure, Flow and Resistance, Veins and their Function, Lymphatic system, Local Control of Blood Flow, Humoral and Nervous Regulation of Circulation, Cardiac Output, Venous Return Arterial Pressure and their Regulation.	2	2
Kidney and Body Fluids: Body Fluid Compartments: ECF, ICF, Interstitial Fluids and Edema. Urine Formation By the Kidneys: Nephron, Glomerular Filtration, Renal Blood Flow, Tubular Reabsorption. Integration of Renal Mechanisms for Control of Blood Volume and ECF Volume.	2	2
Respiration: Mechanics of Pulmonary Ventilation, Pulmonary Volumes and Capacities, Alveolar Ventilation, Functions of the Respiratory Passageways. Physical Principles of Gas Exchange, Transport of Oxygen and carbon dioxide in the Blood and Body Fluids. Regulation of Respiration, Respiratory Dysfunction.	2	2
Gastrointestinal System: Motility, Nervous Control, Blood Circulation, Propulsion and Mixing of Food, Secretory Functions, Digestion and Absorption.	1	1
Endocrinology: Hormone Secretion, Transport and Clearance from Blood, Pituitary, Thyroid, Adrenocortical, Insulin, Parathyroid, Reproductive hormones.	2	2

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	26 Hours			26 Hours	8 Hours	60 Hours
Credit	2			1		3

3. Additional private study/learning hours expected for students per week.	2 Hours
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
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Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

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**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	<b>Knowledge</b>		
1.1	<b>Recall</b> basic cellular physiology & immunological principles to explain how the body defends against infection.	Theory Exam	<p>a. The major problem encountered in general was poor understanding of English language.</p> <p>b. The Short Essay questions were not answered by most of the students. The students are comfortable in answering the MCQ, True/False, Match where they can easily make their guessing</p>
1.2	<b>Outline</b> the normal physiology of blood and its constituents, and <b>record</b> the mechanisms of haemostasis and coagulation.	Theory Exam + Practical Exam	<p>a. The major problem encountered in general was poor understanding of English language. The Short Essay questions were not answered by most of the students. The students are comfortable in answering the MCQ, True/False, Match where they can easily make their guessing</p>
1.3	<b>Describe</b> the function and control of cardiovascular, respiratory, renal, hepatic, gastrointestinal system physiology and its application to clinical practice as related to physical therapy.	Theory Exam Practical Exam Assignments & small group presentations.	<p>a. The major problem encountered in general was poor understanding of English language.</p> <p>b. The Short Essay questions were not answered by most of the students. The students are comfortable in answering the MCQ, True/False, Match where they can easily make their guessing No issues with group presentations.</p>
1.4	<b>State</b> the physiology of muscle and <b>Describe</b> the organization of neuromuscular junction and its receptors and to explain their physiological roles.	Theory Exam Practical Exam Assignments & small group presentations.	<p>c. The major problem encountered in general was poor understanding of English language.</p> <p>d. The Short Essay questions were not answered by most of the students. The students are comfortable in answering the MCQ, True/False, Match where they can easily make their guessing</p>

1.5	<b>Define</b> the physiological effects of hormones and the derangements that result from dysfunction, including the various mechanisms by which hormones affect target cells.	Theory Exam Practical Exam Assignments & small group presentations.	<ul style="list-style-type: none"> <li>a. The major problem encountered in general was poor understanding of English language.</li> <li>b. The Short Essay questions were not answered by most of the students. The students are comfortable in answering the MCQ, True/False, Match where they can easily make their guessing</li> </ul>
2.0	<b>Cognitive Skills</b>		
2.1	<b>Predict</b> the changes in cardiovascular, respiratory, renal, hepatic, gastrointestinal system with resultant changes in other body systems.	Analytical reports, individual/group presentation using smart board, posters, journals, & case studies.	<ul style="list-style-type: none"> <li>a. Some students find difficulty in predicting the deviation of normal physiology mechanism in disease state.</li> <li>b. Individual presentations like seminars can be improved with guidance.</li> </ul>
2.2	<b>Justify</b> the laboratory practical with the understanding of basic physiological mechanism.	Analytical reports, individual/group presentation using smart board, posters, journals, & case studies.	<ul style="list-style-type: none"> <li>c. Some students find difficulty in predicting the deviation of normal physiology mechanism in disease state.</li> <li>d. Individual presentations like seminars can be improved with guidance.</li> </ul>
3.0	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1			
3.2			
4.0	<b>Communication, Information Technology, Numerical</b>		
4.1			
4.2			
5.0	<b>Psychomotor</b>		
5.1	<b>Demonstrate</b> basic sciences practical skills relevant to future practice (palpation of arterial pulsation, counting heart rate & respiratory rate, and observation of gate).	Practical demonstration / audio-visual/Practical Notebook	<ul style="list-style-type: none"> <li>a. No issues in maintaining practical notebook.</li> <li>b. The students finding it difficult in illustrating the each basic procedures in more systematic manner.</li> </ul>
5.2	<b>Perform</b> and interpret some basic bedside laboratory tests (blood picture, blood grouping, bleeding time, and clotting time etc	Practical demonstration / audio-visual/Practical Notebook	<ul style="list-style-type: none"> <li>c. No issues in maintaining practical notebook.</li> <li>d. The students finding it difficult in illustrating the each basic</li> </ul>

			procedures in more systematic manner.
5.3	<b>Perform</b> and interpret some physiological records (as ECG & spiogram) and <b>Perform</b> and interpret basic respiratory function tests.	Practical demonstration / audio-visual/Practical Notebook	a. No issues in maintaining practical notebook. b. The students finding it difficult in illustrating the each basic procedures in more systematic manner.

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First exam	6	20
2	Second exam	12	20
3	Quizzes and assignments	5 and 11	10
4	Final written exam	16 <sup>th</sup> week	40
5	Seminar, preparation and evaluation	During the term	5
6	Attendance and punctuality	During the term	5

## D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

All the students having any doubt in the respective subject/topics can contact me in my contact office hours (10 Hours/week)

## E. Learning Resources

1. List Required Textbooks

Guyton and Hall Textbook of Medical Physiology. 12e John Hall Saunders Elsevier 2010

2. List Essential References Materials (Journals, Reports, etc.)

**Physiology materials can be searched for in Google and you tube.**

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

1. Principles of Anatomy and Physiology Gerard J. Tortora, Bryan H. Derrickson Wiley 2010
2. Human Physiology Stuart Ira Fox McGraw-Hill 2012
3. A Laboratory Guide to Human Physiology: Concepts and Clinical Applications Stuart Ira Fox McGraw-Hill 2012

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

**Delmar's Anatomy and Physiology CD-ROM [CD-ROM]  
ESSENTIALS OF HUMAN ANATOMY AND PHYSIOLOGY + CD-ROM  
Concepts in Medical Physiology CD-ROM Version 1.0 by Julian Seifter  
Anatomy and Physiology Revealed CD Version 2.0**

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

Lecture rooms should be large enough to accommodate 30 students.

Practical Rooms should be large enough to accommodate 20 student

2. Computing resources (AV, data show, Smart Board, software, etc.) Laptop computer projector system Data show to facilitate going over student papers in class
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)  Microscopes - histological sections – incubators – autoclaves – titration equipment, measuring equipments –water baths – digital scales. - safety facilities, ADInstruments Teaching Kits. Etc.

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> <li>Periodical evaluation feed-back form to increase instructor's awareness of the weak and strong points of the class.</li> <li>End of term college evaluation of course by students ( to be collected by the department).</li> <li>End-of-term debriefing in class of students and teacher regarding what went well and what could have gone better.</li> <li>Small group instructional diagnosis (SGID) whereby instructors exchange classes and gather information from each other's' students on specific points outlined by the department and the instructor being evaluated</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
<ul style="list-style-type: none"> <li>Peer evaluation to asses ability of faculty members to work with their colleagues</li> <li>Case observations by supervisors.</li> </ul>
3 Processes for Improvement of Teaching
<ul style="list-style-type: none"> <li>Training sessions</li> <li>Workshops to facilitate the exchange of experiences amongst faculty members.</li> <li>Regular meetings where problems are discussed and solutions given</li> <li>Discussion of challenges in the classroom with colleagues and supervisors</li> <li>Encouragement of faculty members to attend professional development conferences</li> <li>Keep up to date with pedagogical theory and practice</li> <li>Set goals for achieving excellence in teaching at the beginning of each new semester after reviewing last semester's teaching strategies and results</li> </ul>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
<ul style="list-style-type: none"> <li>Check marking of a sample of examination papers either by another faculty member.</li> <li>Arrange with another institution to have two common test items included on an exam and compare marks given.</li> <li>Students who believe they are under graded can have their papers checked by a second reader</li> </ul>

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Compare syllabi and course description with other universities (including those on the net).
- Biannual meetings of faculty members to discuss improvement.
- Refreshment of teaching resources to ensure updating of knowledge.
- Have a curriculum review committee to review the curriculum periodically and suggest improvements
- Use of statistics for course evaluation by students to improve the course.

**Faculty or Teaching Staff: Dr. Moattar Raza Rizvi**

**Signature:** \_\_\_\_\_

**Date Report Completed:** \_\_\_\_\_

**Received by:** \_\_\_\_\_

**Dean/Department Head**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**ELECTROTHERAPY - 1**

**RHPT 244**

**2<sup>ND</sup> SEMESTER 1435-1436**

## Course Specifications

Institution: <b>MAJMAAH UNIVERSITY</b>	Date of Report: <b>5/4/1436</b>
College/Department : <b>College of Applied Medical Sciences / Department of Physical Therapy &amp; Health Rehabilitation</b>	

### A. Course Identification and General Information

1. Course title and code: <b>Electrotherapy 1, RHPT 244</b>			
2. Credit hours: <b>3 hours (2+1+0)</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>PHYSICAL THERAPY PROGRAM</b>			
4. Name of faculty member responsible for the course Course Coordinator: <b>Dr. Amal Abd el baky</b> Course Instructor: <b>Mr. Prashant P. Kashyap (Section: 875 / 876 )</b>			
5. Level/year at which this course is offered: <b>Level 4 / 2<sup>nd</sup> Year</b>			
6. Pre-requisites for this course (if any): <b>Basic Physics</b>			
7. Co-requisites for this course (if any): <b>NA</b>			
8. Location if not on main campus: <b>NA</b>			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

### 1. What is the main purpose for this course?

This course deals with basic principles of physical agents in rehabilitation. It presents a detailed information about different kinds of electrotherapeutic modalities mainly concerned and focusing the high frequency like short wave diathermy, microwave diathermy, ultrasound and shock wave therapy. It also deals about the actinotherapy like Infrared radiation, Ultra violet radiation and laser therapy. It includes the indications, contra indications, production, physiological & therapeutic effects, advantages, dis-advantages, parameters setting, dangers and precautions of the above mentioned modalities. Finally, it emphasis the evaluation, decision making (appropriate selection of electrotherapeutic modality), planning and executing the different methods of application techniques in an orderly way through practical classes.

### 2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

1. The Lectures should also be a part of updating their knowledge through continuous medical education (CME), periodically in rotational basis.
2. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc..)
3. Students will be encouraged to do the following:
  - a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
  - b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
<b>Introduction of high frequency current</b> <ol style="list-style-type: none"> <li>a. Definition of high frequency current</li> <li>b. Oscillating system &amp; Oscillating current</li> </ol> <b>Introduction of Electromagnetic spectrum</b> <ol style="list-style-type: none"> <li>a. Electromagnetic waves &amp; Electromagnetic spectrum</li> <li>b. Properties of electromagnetic waves</li> <li>c. Laws governing radiation (Reflection, Refraction, Absorption and Inverse square law)</li> </ol>	01	04
<b>Introduction to Heat and Thermotherapy modalities</b> <ol style="list-style-type: none"> <li>a. Introduction to heat</li> <li>b. Physical effects of heat</li> <li>c. Modes of heat transfer</li> <li>d. Thermotherapy Modalities (Superficial and Deep)</li> <li>e. General, Physiological and therapeutic effects of heat</li> </ol>	01	04

<b>Infra-Red radiation (IRR)</b> - Characteristics &physics, Physiological effects and uses, Contraindications and dangers, Techniques of applications - Practical application of IR	01	04
<b>Short wave diathermy (SWD)</b> - Continuous SW, Pulsed SW, Characteristics &physics, Physiological effects and indications, Contraindications and dangers and techniques of applications - Practical application	02	08
<b>Microwave diathermy (MWD)</b> - Characteristics &physics, Physiological effects and uses, indications, contraindications and dangers, and techniques of applications - Practical application	01	04
<b>Ultrasound (US)</b> - Characteristics &physics, Physiological effects and uses, indication, contraindications and dangers, and techniques of applications - Practical application	02	08
<b>Ultraviolet Radiation (UVR)</b> - Characteristics &physics, Physiological effects and uses, indications, Contraindications and dangers, and techniques of applications - Practical application	02	08
<b>Laser</b> - Characteristics &physics, Physiological effects and uses, indications, contraindications , dangers, and techniques of applications -Practical application	02	08
<b>Shock Wave Therapy</b> - Characteristics &physics, Physiological effects and uses, indications, contraindications , dangers, and techniques of applications -Practical application	01	04

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30			30		60
Credit	2			1		3

3. Additional private study/learning hours expected for students per week.

5hrs

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.2</b>	<b>Knowledge</b>		
<b>1.2.1</b>	The student will able to recall the basic knowledge related to principles, concepts, & the basic functions of electrotherapy agents (high frequency current) used in physiotherapy	Lecture, Lecture - demonstration & class discussion by teacher, Text book assignments, open text book study, homework & practice, summarizing & note taking, daily re-looping of previously learned material	Theoretical exam (midterm & final exam, Quizzes – using rubrics)
<b>1.2.2</b>	The student will be able to memorize the indication, contraindication, precaution , dangers ,physiological & therapeutic effects of different electrotherapy modality related to high frequency current.		
<b>1.2.3</b>	The student will be able to state different techniques of high frequency electrotherapy modalities.		
<b>2.2</b>	<b>Cognitive Skills</b>		
<b>2.2.1</b>	The students will be able to analyze problems, take decisions and reflect critically on the justifications for assessment findings, while aiming to achieve the individual's treatment goals.	Case method, use of motion pictures, educational films, pod cats & video tapes	Theoretical exam (midterm, final exam - case study, & Quizzes-using rubrics,)
<b>2.2.2</b>	The students will be able to estimate the appropriate high frequency current agents		
<b>2.2.3</b>	The student will able to design a program of treatment using high frequency current agents		
<b>3.1</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
<b>3.1.1</b>	The student will able to demonstrate collecting, organizing information and ideas and to convey those ideas clearly and fluently by writing & effectively interacting with their colleagues in an ethical manner.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Individual/Group Assignments – Using RUBRICS
<b>4.1</b>	<b>Communication, Information Technology, Numerical</b>		
<b>4.1.1</b>	The students will operate to think, write and speak effectively and demonstrate respectful, positive and culturally appropriate behaviour while communicating with others	Recitation, debate, use of technology & instructional resources, faculty website, e-mail.	Topic Presentation – Using RUBRICS
<b>5.1</b>	<b>Psychomotor</b>		
<b>5.1.1</b>	The student will able to operate safely the application of electro-physical high frequency current agents used in physiotherapy	Teacher demonstration, Nonlinguistic representation (Physical models, Kinesthetic representations), Simulation/ Role playing, Hands on, active participation	Practical exam – Using RUBRICS

### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

#### **Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quiz 1 + 2	During the course	10%
2	First Midterm exam - Theory	6/7	10%
3	First Midterm exam - Practical	7	10%
4	Second Midterm exam - Theory	11/12	10%
5	Second Midterm exam - Practical	12	10%
6	Assignment	During the course	05%
7	Topic Presentation	During the course	05%
8	Final Practical Exam	14/15	10%
9	Final exam - Theory	16	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)			
Day		Mr. Prashant	
Sunday			
Monday		8:00 am – 10:00 am	
Tuesday		8:00 am – 10:00 am	
Wednesday			
Thursday		8:00 am – 10:00 am	

#### E. Learning Resources

1. List Required Textbooks
a. <b>Therapeutic Modalities in Rehabilitation</b> , 3 <sup>rd</sup> Edition, Author –William E. Prentice. McGraw-Hill
b. <b>Physical Agents in Rehabilitation : From Research to Practice</b> ; Michelle Cameron, W. B. Saunders
2. List Essential References Materials (Journals, Reports, etc.)
a. <a href="http://www.electrotherapy.org.in">http://www.electrotherapy.org.in</a>
b. <a href="http://www.electrotherapy.org">http://www.electrotherapy.org</a>
c. <a href="http://www.apta.org">www.apta.org</a>



d. <a href="http://www.physio-med.com">www.physio-med.com</a>
e. <a href="http://www.medsourceusa.com">www.medsourceusa.com</a>
f. <a href="http://www.books.google.co.in">www.books.google.co.in</a>
g. <a href="http://www.amazon.co.uk/electrotherapy">www.amazon.co.uk/electrotherapy</a>
h. <a href="http://www.en.wikipedia.org/wiki/electrotherapy">www.en.wikipedia.org/wiki/electrotherapy</a>
i. <a href="http://www.wcpt.org">www.wcpt.org</a>
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
a. <b>Electrotherapy: Evidence based practice by Watson, 12<sup>th</sup> edition.</b>
b. <b>Practical electrotherapy: your guide to optimal treatment. Jan Bjordal, latest edition, prima books.</b>
c. <b>Physical Agents: Theory And Practice by Barbara J. Behrens and Susan L. Michlovitz (Paperback - July 16, 2005)</b>
d. <b>Electrotherapy Explained : Principles and Practice; V Robertson, A Ward, J Low and A Reed, Elsevier</b>
e. <b>Principles and Practice of Electrotherapy by Joseph Kahn (Paperback - Jan. 1994).</b>
f. <b>Clinical Electrotherapy (3rd Edition) by Roger M. Nelson, Dean P. Currier, and Karen W. Hayes (Paperback - Feb. 15, 1999)</b>
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)
a. <a href="http://www.electrotherapy.org">http://www.electrotherapy.org</a>
b. <a href="http://www.csp.org.uk/tagged/electrotherapy">http://www.csp.org.uk/tagged/electrotherapy</a>
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. <b>Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</b> <b>Lecture room suitable for 25 students.</b> <b>Separate Practical lab suitable for 25 students. (With proper insulation of wires, central stabilizing unit, Wooden couches preferably )</b>
2. Computing resources (AV, data show, Smart Board, software, etc.) <b>One computer in the classroom, and another in the lab.</b> <b>Projector. (In both classroom and lab)</b> <b>Smart board. (In both classroom and lab)</b> <b>Data show. (In both classroom and lab)</b>
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) <b>A detailed lab accessories required will be attached as a separate list in the first week of the semester.</b>

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
--

<p>a. Asking question before, during and after each lecture</p> <p>b. Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</p>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p> <p>a. Frequent feedback from the students &amp; clarification of doubts now &amp; then</p> <p>Feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff.</p>
<p>3 Processes for Improvement of Teaching</p> <p>a. Attending frequent workshops</p> <p>b. Efficient &amp; effective use of teaching methods</p> <p>c. Easy &amp; illustrative examples</p>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <p>a. Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</p> <p>b. Matrix – Mapping</p> <p>c. Peer review / department council committee review</p>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <p>a. Continuous evaluation of the students during the term, and frequent updating of the course content.</p>

Faculty or Teaching Staff: 1. Mr. Prashant P. Kashyap

Course Coordinator: Prof .Dr/ Amal Mohamed Abd El baky

Signature (1) : \_\_\_\_\_ Date Report Completed: 5/4/1436

Received by: Dr. Fuzail Ahmad

Dean/Department Head

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

## Course Specifications

Institution	<b>Al Majmaah University</b>	Date of Report
College/Department	<b>College of Applied Medical science for Girls / Physical Therapy Department</b>	

### A. Course Identification and General Information

1. Course title and code: ( 245-RHPT) <b>Introduction to Biomechanics</b>		
2. Credit hours <b>2 hours credits/week</b> <b>Lecture:1h</b> <b>Practical:1h</b>		
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Physical therapy program</b>		
4. Name of faculty member responsible for the course <b>Dr: Walaa Sayed Mohammad</b>		
5. Level/year at which this course is offered <b>for 4th level/ 2nd year</b>		
6. Pre-requisites for this course (if any)		
7. Co-requisites for this course (if any)		
8. Location if not on main campus <b>None</b>		
9. Mode of Instruction (mark all that apply)		
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage? <input type="text" value="80"/>
b. Blended (traditional and online)	<input checked="" type="checkbox"/>	What percentage? <input type="text" value="20"/>
c. e-learning	<input type="checkbox"/>	What percentage? <input type="text"/>
d. Correspondence	<input type="checkbox"/>	What percentage? <input type="text"/>
f. Other	<input type="checkbox"/>	What percentage? <input type="text"/>
Comments:		

## B Objectives

1. What is the main purpose for this course? Upon the completion of this course, students should be able to Build up knowledge of the basic principles and terminology of kinesiology, describe the impact of forces on human body in addition to develop understanding of normal biomechanics of bone, and skeletal muscles under normal and pathological conditions.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field) <ul style="list-style-type: none"> <li>1. Updating course material.</li> <li>2. Updating references used.</li> <li>3. Updating assessment and changes questions .</li> </ul>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached).

The student learns in this course the analysis and types of forces and the applications of these on the human body and the impact of gravity on the movements and the use of mechanics in physiotherapy.

1. Topics to be Covered		
Topics to be Covered	No of Weeks	Contact hours
<b>-Introduction</b>  <b>-Biomechanical Terms:-</b> <ul style="list-style-type: none"> <li>○ Kinesiology</li> <li>○ Biomechanics</li> <li>○ Kinematics</li> <li>○ Kinetics</li> </ul> <b>-Osteokinematics:</b> <ul style="list-style-type: none"> <li>○ Planes of Human Motion</li> <li>○ Axes of Rotation</li> <li>○ Degree of freedom.</li> </ul>	1 <sup>st</sup> Week	3



<b>-Forces (internal and external):</b> <ul style="list-style-type: none"> <li>○ Definition of force.</li> <li>○ Types of forces (internal &amp; external).</li> <li>○ External forces.</li> <li>○ The four characteristics of the force.</li> <li>○ Resolution and composition of forces.</li> </ul>	2 <sup>nd</sup> Week	3
<b>-Forces (internal and external):</b> <ul style="list-style-type: none"> <li>○ Internal forces.</li> <li>○ Types of muscle contraction.</li> <li>○ Application on types of muscle contraction and line of application of the muscle force.</li> </ul>	3 <sup>rd</sup> Week	3
<b>-Forces systems:</b> <ul style="list-style-type: none"> <li>○ Types of Forces systems.</li> <li>○ Forces system I (linear and parallel).</li> <li>○ Forces system II (force couple and concurrent force systems)</li> </ul>	4 <sup>th</sup> Week	3
<b>--Centre of gravity (COG):</b> <ul style="list-style-type: none"> <li>○ Definition.</li> <li>○ Location.</li> <li>○ Determination of location of COG. <ul style="list-style-type: none"> <li>1- Total body COG</li> <li>2- Segmental body COG.</li> </ul> </li> <li>○ Values of determination of COG</li> </ul> <b>-Stability:</b> <ul style="list-style-type: none"> <li>○ Definition of terms (stability &amp; equilibrium).</li> <li>○ Factors affecting stability &amp; equilibrium.</li> </ul>	5 <sup>th</sup> Week	3
<b>-In-Course Exam I (Theoretical midterm )</b>	6 <sup>th</sup> Week	

<b>-Simple body machine I (Lever system):</b> <ul style="list-style-type: none"> <li>○ Definition of the 3 classes of lever.</li> <li>○ First class of lever</li> <li>○ Second class of lever.</li> <li>○ Third class of lever.</li> <li>○ Torque and two joint muscles.</li> </ul> <b>-Simple body machine II (Pulley system):</b> <ul style="list-style-type: none"> <li>○ Definition.</li> <li>○ Function.</li> <li>○ Types.</li> <li>○ Anatomical application</li> </ul>	7 <sup>th</sup> Week	3
<b>-Mechanics of bones:</b> <ul style="list-style-type: none"> <li>○ Introduction to mechanics of bones</li> <li>○ Stress strain curve of bone under load</li> </ul>	8 <sup>th</sup> & 9 <sup>th</sup> Week	6
<b>-Factors affecting stress strain curve:</b> <ul style="list-style-type: none"> <li>○ Loading characteristics</li> <li>○ Mechanical properties of bones.</li> <li>○ Structural properties of bones.</li> </ul>	10 <sup>th</sup> , 11 <sup>th</sup> weeks	6
<b>-In-Course Exam II (Theoretical midterm )</b>	12 <sup>th</sup> week	
<b>-Pathomechanics of bone:</b> <ul style="list-style-type: none"> <li>○ Improper of various loading modes</li> <li>○ Stress distribution in fracture fixation.</li> </ul>	13 <sup>th</sup> week	3
<b>-Mechanics of soft tissues:</b>	14 <sup>th</sup> & 15 <sup>th</sup> week	6
<b>-Final Exam</b>	16 <sup>th</sup> week	

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	15		30			45
Credit	15		15			30

3. Additional private study/learning hours expected for students per week.	2
--	---

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.1	To define the kinesiological terminology such as kinematics, kinetics, biomechanics.	1. Lecture using a. Power point presentation b. Smart board. c. Illustrative schematic diagrams	1. Oral exam 2. Written exam
1.2	To describe the basic characteristics of the different types of force system.	2. Small group discussion	
<b>2.0</b>	<b>Cognitive Skills</b>		
2.1	To analyze forces with respect to force resolution and composition.	1. Lecture using a. Power point presentation b. Smart board. c. Illustrative schematic diagrams	1. Practical exam 2. Assignment 3. Written exam
2.2	To differentiate between different types of muscle contraction.	2. Small group discussion	
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	To illustrate normal stress-strain curve for selected body tissue types.	1. Small group discussion 2. Lecture. 3. Lab.	1. Practical exam 2. Assignment 3. Written exam
3.2	To classify the skeletal muscles regarding the basic components of the lever and pulley systems.		
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1	To locate the total and the segmental body COG.	1. Mathematical calculation. 2. Student practical measurement.	1. Practical exam 2. Case study question.
4.2			
<b>5.0</b>	<b>Psychomotor</b>		
5.1	To demonstrate the degree of stability of the human body depending on the factors affecting it.	1. Lecture. 2. Lab. 3. Small group discussion.	1. Practical exam 2. Written exam
5.2			

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret,

	appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quizzes (Every week quiz is done and then gain the average of the marks of quizzes).	4 <sup>th</sup> & 10 <sup>th</sup> & 14 <sup>th</sup> week	15 %
2	Assignment	3 <sup>th</sup> week	5%
3	Theoretical mid term	6 <sup>th</sup> , 11 <sup>th</sup> week	30%
4	Practical mid term	6 <sup>th</sup> week	10%
5	Final practical exam	15 <sup>th</sup> week	10%
6	Final Theoretical exam	16 <sup>th</sup> week	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

6 hours per week

#### E. Learning Resources

1. List Required Textbooks

- Le Veau B.F. (2011) "Biomechanics of human motion", SLACK Incorporated; Thorofare USA.
- Frankel VH and Nordin M (2004) "Basic biomechanics of the skeletal system" published by Herny Kimton, London, USA Lea & Febiger, Philadelphia.

2. List Essential References Materials (Journals, Reports, etc.)

- Norkin CC and Levangie PK (2011) "Joint structure and function. A comprehensive Analysis" 5<sup>th</sup> ed., F. A. Davis Company; USA.

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- Gorwitzkee BA and Milner M (2006) "Understanding the scientific bases of human movement " 2<sup>nd</sup> Edition, Williams and Wilkins, Baltimore, London.

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

Some medical webs such as

1. Biomechanics yellow pages - <http://www.isbweb.org>.
2. Biomechanics world wide – <http://www.per.valberta.ca/Biomechanic>.
3. [www.Pubmed.com](http://www.Pubmed.com)
4. [www.BMJ.com](http://www.BMJ.com)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

**Using power point program**

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none"> <li>a. Lecture room (25 seats)</li> <li>b. Practical lab (10 seats)</li> </ul>
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none"> <li>a. Data show device</li> <li>b. Smart Board</li> </ul>
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) <ul style="list-style-type: none"> <li>a. Each member need laptop</li> <li>b. Classroom and Practical lab require wireless network</li> </ul>

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> <li>a. Exams</li> <li>b. Project or assignment</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor <ul style="list-style-type: none"> <li>a. Questionnaire form</li> </ul>
3 Processes for Improvement of Teaching <ul style="list-style-type: none"> <li>a. Periodic updating of course</li> <li>b. Use various methods of teaching</li> <li>c. Periodic change of exam types.</li> <li>d. Multiple assignments.</li> <li>e. Brain storming.</li> </ul>

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

None

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- a. Updating the material of the course
- b. Updating the assessment used
- c. Questionnaire form

Faculty or Teaching Staff: \_\_\_\_\_ Dr. Walaa Sayed Mohammad/ Walaa Mohamed Elsayed \_\_\_\_\_

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Received by: \_\_\_\_\_ Dean/Department Head

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**THERAPEUTIC EXERCISE- 1**

**RHPT-246/ PHT - 224**  
**Course Specifications**  
**(CS)**

## Course Specifications

Institution: : <b>MAJMAAH UNIVERSITY</b>	Date of Report:
College/Department : <b>COLLEGE OF APPLIED HEALTH SCIENCES</b>	

### A. Course Identification and General Information

1. Course title and code: <b>THERAPEUTIC EXERCISE -1, RHPT -246/ PHT – 224.</b>			
2. Credit hours: <b>3 ( 1+2+0 )</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course <div style="margin-left: 40px;"> Course Coordinator : <b>Dr. Mohamed Sherif (Section 879)</b>  Course Instructors <b>1. Dr. Mahamed Ateef (Section:863)</b>  <b>2. Dr. Seyam (Section 865)</b>  <b>3. Mrs. Savitha singh (Section 256)</b> </div>			
6. Pre-requisites for this course (if any) <b>NA</b>			
7. Co-requisites for this course (if any) <b>PHT 226</b>			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			



## B Objectives

### 1. What is the main purpose for this course?

Upon the completion of this course, students should have a clear understanding of the followings:

- a. Basic principles, indications, and precautions to be considered when performing different forms of exercises.
- b. Applying on one of his/her colleagues the different types of movements and exercises used in muscle re-education for any parts of the body.
- c. Able to express in writing and demonstration the different steps to be used in the progressive strengthening of any muscle group of the human body, specification made on the use of gravity, the patient and therapist starting positions, the therapist grasps, the type of muscle contraction used and the procedures of application or assistance or manual resistance.

### 2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

1. The Lectures should also be a part of updating their knowledge through continuous medical education (CME), periodically in rotational basis.
2. The Lecturers should give more lively examples in order to improve the thought process of the students.
3. Students will be encouraged to do the following:
  - a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
  - b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.

**C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)**

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
<b>Introduction to Therapeutic Exercise</b> <ul style="list-style-type: none"> <li>Anatomical movements, Surface Anatomy of the individual joints, Rhythm of movement.</li> <li>Timing of movement. Duration of movement, Classification of Movement.</li> <li>Effects of exercise: Physiological effects, Therapeutic effects, Indications and contra-indications.</li> </ul>	Week 1	05
<b>Muscle work:</b> <ul style="list-style-type: none"> <li>Isotonic (concentric, eccentric), Isometric (static).</li> <li>Group action: Agonists (prime movers). Antagonists, synergists, Fixators.</li> <li>Angle of muscle pull, Mechanical efficiency of the muscles.</li> </ul>	Week 2	05
<b>Fundamental &amp; Derived Position:</b> Positions, their muscle work, effects and uses. Specify the importance and derived positions for each one: standing, kneeling, sitting, lying, and hanging.	Week 3	05
<b>Range of Motion</b> <ul style="list-style-type: none"> <li>Range of Motion: Involves all the range of motion exercises including passive, assisted, active exercises and self- assistive exercises in detail .</li> </ul>	Weeks 4&5	05
<b>First midterm exam practical &amp; theoretical</b>	Week 6	05
<b>Stretching</b> <ul style="list-style-type: none"> <li>Definitions of Terms Related to Mobility and Stretching: Flexibility, Hypo mobility, Contracture.</li> <li>Properties of Soft Tissue-Response to Immobilization and Stretch, Properties of Contractile Tissue.</li> <li>Determinants, Types and Effects of Stretching Intervention.</li> <li>Guidelines for Application of Stretching Interventions</li> </ul>	Week 7,8 &9	15



Resistance Exercise <ul style="list-style-type: none"> <li>▪ Muscle Performance and Resistance Exercise-Definitions: Strength, Power, Endurance.</li> <li>▪ Determinants of Resistance Exercise: Alignment and Stabilization, Intensity, Volume, Exercise Order, Frequency, Duration.</li> <li>▪ Types of Resistance Exercise: Manual and Mechanical Resistance Exercise, Isometric Exercise (Static Exercise), Dynamic Exercise- Concentric and Eccentric Isokinetic Exercise, Open-Chain and Closed-Chain Exercise</li> </ul>	Week10 ,11&12	15
<b>Second midterm exam practical &amp; theoretical</b>	Week13	
<b>Peripheral Joint Mobilization</b> <ul style="list-style-type: none"> <li>▪ Definitions of Terms: Mobilization/Manipulation, Self-Mobilization (Auto-mobilization), Mobilization with Movement.</li> <li>▪ Indications, Limitations, Contraindications and Precautions for Stretching. Procedures for Applying Passive Joint Mobilization Techniques: Examination and Evaluation, Grades or Dosages of Movement, Positioning and Stabilization, Speed, Rhythm, and Duration of Movements, Patient Response.</li> <li>▪ Peripheral Joint Mobilization Techniques: Shoulder Girdle Complex, Elbow and Forearm Complex, Wrist Complex, Hand and Finger Joints, Hip Joint, Knee and Leg, Ankle and Foot Joints.</li> </ul>	Weeks 14& 15	10
<b>Final exam practical</b>		
<b>Final exam theory</b>		

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	15			60		75
Credit	1			2		3

3. Additional private study/learning hours expected for students per week.	<input type="text"/>
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#### 4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
a.1	NA		
a.2	a2.1 Outline knowledge of therapeutic Exercise and its techniques used to treat patient problems.	Lectures, Group discussions.	Theory Exams, Quizzes
<b>b.0</b>	<b>Cognitive Skills</b>		
b.1	NA		
b.2	b2.1 .Design and summarize various techniques practiced in therapeutic exercise that are safe, effective and consistent with specified functional goals.	Lectures, Group discussions, Role play	Theory Exams, Quizzes
<b>c.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
c.1	c1.1- work effectively in groups and demonstrate responsibility for his/her own learning and continuing personal and professional development	Small group discussions	Group Assignments
c.2			
<b>d.0</b>	<b>Communication, Information Technology, Numerical</b>		
d.1	d1.1. Demonstrate respectful, positive and culturally appropriate behavior while gathering information, documenting and communicating complex findings to patients and members of the health care team	Case study discussions	Practical examination, Log book
d.2	NA		
<b>e.0</b>	<b>Psychomotor</b>		
e.1	e1.1 <b>Demonstrate</b> the manual dexterity skills, to perform elements of examination, evaluation and execution of various therapeutic exercise techniques in a safe and efficient manner	Teacher demonstration, Nonlinguistic representation (Physical models, Kinesthetic representations), Simulation/ Role playing, Hands on, active participation	Practical Examination
5.2	NA		

**Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching**

NQF Learning Domains	Suggested Verbs
----------------------	-----------------

<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct



Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
<b>1</b>	Quizzes	4 - 10	5%
<b>2</b>	First Midterm exam -practical	6	10%
<b>3</b>	Midterm exam –theory	7	10%
<b>4</b>	Second Midterm exam practical	12	15%
<b>5</b>	Second Midterm exam theory	12	10%
<b>6</b>	Logbook	1 - 14	5 %
<b>7</b>	ASSIGNMENT	1- 14	5%
<b>8</b>	Final exam - Practical	15	25%
<b>9</b>	Final Exam Theory	16	15%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Sunday - 1pm to 1:50 am (1 hrs)

Wednesday-1-3pm[2hrs]

Thursday 12-2pm (2 hrs)

#### E. Learning Resources

1. List Required Textbooks

**Therapeutic Exercise: Foundations and Techniques by Carolyn Kisner, Lynn Allen Colby, Lynn Allen Colby, F. A. Davis Company**

2. List Essential References Materials (Journals, Reports, etc.)

Journal of sports physiology.

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

**Therapeutic Exercise for Musculoskeletal Injuries; by Peggy A. Hauglum, Human Kinetics**  
**Therapeutic Exercise: Moving Toward Function; Carrie M Hall & Lori Thein Brody, Lippincott Williams & Vikins**

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)



- ❖ **Lecture room suitable for 25 students.**
- ❖ **Practical lab suitable for 25 students.**

2. Computing resources (AV, data show, Smart Board, software, etc.)

- ❖ **One computer in the classroom, and another in the lab.**
- ❖ **Projector. (In both classroom and lab)**
- ❖ **Smart board. (In both classroom and lab)**
- ❖ **Data show. (In both classroom and lab)**

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

**A detailed lab accessories required will be attached as a separate list**

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- ❖ **Asking question before, during and after each lecture**
- ❖ **Provision of appraisal form to the students & to rectify changes if any**
- ❖ **Exams**

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

3 Processes for Improvement of Teaching

- ❖ **Attending frequent workshops**
- ❖ **Efficient use of teaching methods**
- ❖ **Easy & illustrative examples**

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

**Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.**



5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

**Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.**

**Faculty or Teaching Staff:** \_\_ Dr. Mohamed Sherif , Dr. Ateef, Dr. Seyam( Boys Section )  
Mrs. Savita Singh ( Girls Section )

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Course Coordinator: Dr Mohamed Sherif** **Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad**

**Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**NEUROANATOMY**

**RHPT 351**

## Course Specifications

Institution: <b>Majmaah University</b>	Date of Report:
College/Department : <b>College of Applied Medical Sciences / Physical Therapy&amp; Health Rehabilitation</b>	

### A. Course Identification and General Information

1. Course title and code: <b>Neuroanatomy RHPT-351</b>			
2. Credit hours: 3 (2+1+0)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Physical Therapy and Health Rehabilitation</b>			
4. Name of faculty member responsible for the course Course Coordinator : <b>Dr. Shaik Abdul Rahim</b> Course Instructor : <b>Mr.Faizan Zaffar Kashoo</b> (Section:1590 / 1591)			
5. Level/year at which this course is offered: Level 5, 3 <sup>rd</sup> year			
6. Pre-requisites for this course (if any) : RHPT-242			
7. Co-requisites for this course (if any): NA			
8. Location if not on main campus: Main Campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

<ol style="list-style-type: none"><li>1. What is the main purpose for this course?<ol style="list-style-type: none"><li>a. The student will gain knowledge in the principles of neuroanatomy.</li><li>b. Know the structural organization of the central nervous system, including many sensory and motor systems and higher integrative centers,</li><li>c. Acquire the language essential for the identification of neuroanatomical structures and for use in clinical situations.</li><li>d. To provide a structural basis for understanding the function of the central nervous system.</li><li>e. To emphasize points of clinical relevance through use of appropriate terminology and examples.</li><li>f. To integrate neuroanatomical and clinical information in a format that will meet the educational needs.</li></ol></li></ol>
<ol style="list-style-type: none"><li>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)<ol style="list-style-type: none"><li>1. The usage of web based assistance to develop some innovative ways to learn neuroanatomy.</li><li>2. The usage of IT in exploring the opportunity to learn neuroanatomy.</li></ol></li></ol>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

This course will examine the structural, functional and developmental features of the human nervous system with reference to different disease states. It establishes an anatomical basis for the study and understanding of the nervous system as presented in the classroom and the lab. Application of these studies will help in the solving of problems encountered in your career as a future health care professional.

<b>1. Topics to be Covered</b>			
<b>List of Topics</b>		<b>No. of Weeks</b>	<b>Contact Hours</b>
<b>Unit 1: Introduction and Organization of the Nervous System</b>	<ol style="list-style-type: none"> <li>1. Neuron And Neuroglia</li> <li>2. Classification Of Nervous System</li> <li>3. Terminology.</li> </ol>	1	4
<b>Unit 2: The Spinal Cord and Brain stem and Radio Imaging Techniques</b>	<ol style="list-style-type: none"> <li>1. Structure Of Spinal Cord</li> <li>2. Ascending And Descending Tracts</li> <li>3. Blood Supply</li> <li>4. Meninges Of Spinal Cord</li> <li>5. CT scan.</li> <li>6. MRI Scan.</li> </ol>	2	8
<b>Unit 3: The Cerebellum</b>	<ol style="list-style-type: none"> <li>1. Structure Of Cerebellum</li> <li>2. Connections</li> <li>3. Blood Supply</li> </ol>	1	4
<b>Unit 4: Cerebrum</b>	<ol style="list-style-type: none"> <li>1. The Structure And Functional Localization Of The Cerebral Cortex</li> <li>2. Meninges Of Brain</li> <li>3. Circle of Willis</li> </ol>	2	8
<b>Unit 5: Reticular Formation and the Limbic System</b>	<ol style="list-style-type: none"> <li>1. Formation Of Reticular Formation And Limbic System</li> <li>2. Function Of Reticular Formation</li> <li>3. Clinical Relevance</li> </ol>	1	4
<b>Unit 6: The Basal Ganglia.</b>	<ol style="list-style-type: none"> <li>1. Structure And Function Of Basal Ganglia</li> <li>2. Connections</li> <li>3. Clinical Relevance</li> </ol>	1	4
<b>Unit 7: Cranial Nerves</b>	<ol style="list-style-type: none"> <li>1. Origin And Function Of Cranial Nerves</li> <li>2. Function</li> <li>3. Clinical Relevance</li> </ol>	1	4
<b>Unit 8: The Thalamus and Hypothalamus</b>	<ol style="list-style-type: none"> <li>1. Structure And Connections</li> <li>2. Disorders Associated With Thalamic Dysfunction</li> </ol>	2	8
<b>Unit 9: The Autonomic Nervous System</b>	<ol style="list-style-type: none"> <li>1. Structure And Formation Of Autonomic Nervous System</li> </ol>	1	4
<b>Unit 10: The Ventricular System</b>	<ol style="list-style-type: none"> <li>1. Structure Of Ventricular System Of Brain</li> <li>2. Circulation Of CSF</li> </ol>	1	4

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30	-----	-----	30	-----	60
Credit	30	-----	-----	15	-----	45

3. Additional private study/learning hours expected for students per week.	2
--	---

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
A	Knowledge		
A1.1	1.1.1 The student will be able to label detailed structure of the nervous system and explain the relationship between the anatomy and function.	<ul style="list-style-type: none"><li>➤ Lectures using power point presentations, smart board, and illustrative schematic diagrams.</li><li>➤ Encouraging students to think, acquire knowledge, discuss and share knowledge and views.</li><li>➤ Handout of lecture notes for each topic</li></ul>	Theoretical exam (midterm & final exam, Assignments and Quizzes)
A1.2	1.1.2 The student will describe the different parts of CNS and PNS		
B	Cognitive Skills		
B1.1	2.1.1 The student will be able to differentiate the components of brain and spinal cord and their connections.	<ul style="list-style-type: none"><li>➤ Lectures/teaching students how to understand, appreciate and integrate various concepts</li><li>➤ Class discussions/teaching students to think critically and independently and engage in group discussions</li><li>➤ Individual meetings with students/ encouraging them to discuss topics outside the classroom</li></ul>	Theoretical exam (midterm & final exam, Assignments and Quizzes)
B1.2	2.1.2 The student will be able to analyze the anatomical organization and function of the central nervous system.		
3.0	Interpersonal Skills & Responsibility		
3.1	-----	-----	-----
3.2			
4.0	Communication, Information Technology, Numerical		
4.1	-----	-----	-----
4.2	-----	-----	-----



<b>E</b>	<b>Psychomotor</b>		
<b>E1.1</b>	The student will be able to draw and show parts of central and peripheral nervous system	Teacher demonstration, Nonlinguistic representation, Hands on, active participation	Practical exam – Using RUBRICS

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct



Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

**5. Schedule of Assessment Tasks for Students During the Semester**

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Mid Term Exam – Theory	6 <sup>th</sup>	20%
2	First Mid Term Exam – Practical	7 <sup>th</sup>	5%
3	Second Mid Term Exam – Theory	12 <sup>th</sup>	20%
4	Second Mid Term Exam – Practical	13 <sup>th</sup>	5%
5	Assignments / Quizzes	1 – 13 <sup>th</sup>	5%
6	Log book	At the end of the course	5%
6	First Mid Term Exam – Practical	15 <sup>th</sup>	10%
7	First Mid Term Exam – Theory	16 <sup>th</sup>	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Students can meet the faculty during the office hours mentioned in the Schedule .

#### Learning Resources

<ol style="list-style-type: none"> <li>1. Snell's Neuroanatomy: Richard Snell</li> <li>2. Atlas of Neuroanatomy: Warner, Joseph J.</li> </ol>
<p>4-.Electronic Materials, Web Sites etc</p> <p>Resources on the Web:</p> <p>Neurology exam: <a href="http://www.neuroexam.com/">http://www.neuroexam.com/</a></p> <p>Neuroradiology: <a href="http://www.med.harvard.edu/AANLIB/home.html">http://www.med.harvard.edu/AANLIB/home.html</a></p> <p>The Human Brain Atlas: <a href="https://www.msu.edu/~brains/brains/human/index.html">https://www.msu.edu/~brains/brains/human/index.html</a></p> <p>Neuroscience Tutorial: <a href="http://thalamus.wustl.edu/course/">http://thalamus.wustl.edu/course/</a></p> <p>Cranial nerve pathways: <a href="http://www.meddean.luc.edu/lumen/MedEd/GrossAnatomy/h_n/cn/cn1/mainframe.htm">http://www.meddean.luc.edu/lumen/MedEd/GrossAnatomy/h_n/cn/cn1/mainframe.htm</a></p> <p>Interactive Brain Atlas: <a href="http://www9.biostr.washington.edu/da.html">http://www9.biostr.washington.edu/da.html</a></p> <p>The Whole Brain Atlas <a href="http://www.med.harvard.edu/AANLIB/home.html">http://www.med.harvard.edu/AANLIB/home.html</a></p> <p>Digital Anatomist Interactive Atlases <a href="http://www9.biostr.washington.edu/da.html">http://www9.biostr.washington.edu/da.html</a></p> <p>Gross anatomy laboratory dissections <a href="http://sprojects.mmi.mcgill.ca/brain/contents.htm">http://sprojects.mmi.mcgill.ca/brain/contents.htm</a></p> <p>Coronal and horizontal sections <a href="http://thalamus.wustl.edu/course/corhor.html">http://thalamus.wustl.edu/course/corhor.html</a></p> <p>Basic somatosensory pathway (discriminative touch) <a href="http://thalamus.wustl.edu/course/bassens.html">http://thalamus.wustl.edu/course/bassens.html</a></p> <p>Somatosensory pathways from the body <a href="http://thalamus.wustl.edu/course/body.html">http://thalamus.wustl.edu/course/body.html</a></p> <p>Somatosensory pathways from the face <a href="http://thalamus.wustl.edu/course/face.html">http://thalamus.wustl.edu/course/face.html</a></p> <p>Basic motor pathways <a href="http://thalamus.wustl.edu/course/basmot.html">http://thalamus.wustl.edu/course/basmot.html</a></p> <p>Basal ganglia and cerebellum <a href="http://thalamus.wustl.edu/course/cerebell.html">http://thalamus.wustl.edu/course/cerebell.html</a></p> <p>Hypothalamus and autonomic nervous system <a href="http://thalamus.wustl.edu/course/hypoANS.html">http://thalamus.wustl.edu/course/hypoANS.html</a></p> <p>Limbic system</p>

<a href="http://thalamus.wustl.edu/course/limbic.html">http://thalamus.wustl.edu/course/limbic.html</a> Brodmann areas <a href="http://spot.colorado.edu/~dubin/talks/brodmann/brodmann.html">http://spot.colorado.edu/~dubin/talks/brodmann/brodmann.html</a>
5- Other learning material such as computer-based programs/CD, professional standards/regulations

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (ie number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Lecture rooms, laboratories, etc.) <ul style="list-style-type: none"> <li>➤ Lecture room suitable for 25 students.</li> <li>➤ Practical lab suitable for 25 students.</li> </ul>
2. Computing resources <ul style="list-style-type: none"> <li>➤ One computer in the classroom, and another in the lab.</li> <li>➤ Projector. (In both classroom and lab)</li> <li>➤ Smart board. (In both classroom and lab)</li> <li>➤ Data show. (In both classroom and lab)</li> <li>➤ Models</li> </ul>

#### G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> <li>a. Asking question before, during and after each lecture</li> <li>b. Provision of appraisal form to the students &amp; to rectify changes if any</li> <li>c. Exams</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
3 Processes for Improvement of Teaching <ul style="list-style-type: none"> <li>1. Attending frequent workshops</li> <li>2. Efficient &amp; effective use of teaching methods</li> <li>3. Easy &amp; illustrative examples</li> </ul>
4. Processes for Verifying Standards of Student Achievement (eg. check marking by an independent faculty member of a sample of student work, periodic exchange and remarking of a sample of assignments with a faculty member in another institution) <ul style="list-style-type: none"> <li>a. Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</li> </ul>
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.



1. Peer review of the course taught
2. Stake holder's feedback on the course taught.
3. Keeping track of any recent advances in the field of neuroanatomy.

**Faculty or Teaching Staff: Mr. Faizan Zaffar Kashoo**

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Course Coordinator: Dr. Shaik Abdul Rahim** **Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad** **Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**Therapeutic Exercise 2  
RHPT 352**

## Course Specifications

Institution	<b>Majmaah University</b>	Date of Report: 1435-1436 2 <sup>nd</sup> semester (18/1/2015)
College/Department : <b>College of Applied Medical Sciences / Department of Physical Therapy &amp; Health Rehabilitation</b>		

### A. Course Identification and General Information

1. Course title and code: <b>Therapeutic Exercise 2, RHPT 352</b>			
2. Credit hours: <b>3 hours (1 + 2 + 0)</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Level 5</b>			
4. Name of faculty member responsible for the course Course Coordinator : Dr. Shekh Abdulrahim			
5. Level/year at which this course is offered			
6. Pre-requisites for this course (if any)			
7. Co-requisites for this course (if any)			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			



## B Objectives

<p>1. What is the main purpose for this course?</p> <p>This course introduces the students to the principle, methods, the physiological and therapeutic effects, the indications, contraindications, dangers and precautions of different treatment techniques.</p> <p>The course provides the student with the required information about the techniques of application to treat various acute &amp; chronic conditions. (In general Orthopaedic &amp; Geriatric, Adult &amp; Paediatric Neurology &amp; Cardiac conditions)</p>
<p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <p>1. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)</p> <p>2. Students will be encouraged to do the following:</p> <p>a. Acquiring knowledge through the Internet, journals and verifying the other information resources.</p> <p>b. Sharing the acquired knowledge with critical/lateral thinking &amp; clinical reasoning.</p> <p>Conduct field visits to electrotherapy department in hospitals</p>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
<p><b>Posture</b></p> <ul style="list-style-type: none"> <li>➤ Definition ,muscles responsible for good posture</li> <li>➤ Postural mechanisms, abnormal postures</li> <li>➤ Assessment of posture, posture correction by : strengthening of muscles, mobilization of trunk, relaxation, active correction of deformities, passive correction, postural awareness, abdominal and back extensor.</li> <li>➤ Outline principles in bracing of the trunk and surgical correction.</li> <li>➤ Identification of abnormal posture, and postural corrective measures</li> </ul>	Week1 &2	10

<b>Traction:</b> <ul style="list-style-type: none"> <li>➤ Describe the basic biomechanical and physiological aspects to mechanical and spinal traction, dosages, indication &amp; contraindication of mechanical spinal traction</li> <li>➤ Appropriate patient treatment of specific spinal conditions with mechanical spinal traction</li> <li>➤ Spinal loading and progression in spinal rehabilitation and specifically the role of therapeutic modalities.</li> </ul>	Week 3	5
<b>Suspension therapy</b> <ul style="list-style-type: none"> <li>➤ Basic physics of simple pendulum and pendular movement</li> <li>➤ Types of suspension : pendular, axial, eccentric fixation (anterior, posterior, medial, lateral)</li> <li>➤ Indications and technique for each type of suspension</li> <li>➤ Axial and eccentric fixation for mobilizing, strengthening, and reeducation of various muscles and joints.</li> </ul>	Week 4	5
<b>Relaxation</b> <ul style="list-style-type: none"> <li>➤ Muscle fatigue, muscle spasm, general causes, signs and symptoms of tension</li> <li>➤ Factors contributing to fatigue</li> <li>➤ Types of relaxation (local &amp; general)</li> <li>➤ Indications for relaxation</li> <li>➤ Techniques of relaxation</li> </ul>	Week 5&6	10
<b>In course examination 1 (Mid Term Exam – Theory &amp; Practical)</b>	Week 7	
<b>Coordination exercises</b> <ul style="list-style-type: none"> <li>➤ Balance (static and dynamic)</li> <li>➤ Mechanism of neuromuscular coordination</li> <li>➤ Incoordination: lower motor neuron lesions, UMN lesions, cerebellar lesions, loss of kinesthetic sense (Tabes dorsalis, Syringomyelia, Leprosy), imbalance due to muscular disease.</li> <li>➤ Reeducation of balance, Frenkels exercise, PNF techniques</li> <li>➤ Reeducation techniques of balance and coordination</li> </ul>	Week 7&8	10
<b>Medical massage techniques</b> <ul style="list-style-type: none"> <li>➤ Indications, contraindications</li> <li>➤ Physiological effects of massage on various systems of body</li> <li>➤ Techniques used in massage: stroking, effleurage, kneading, petrissage, percussion, tapotement etc.</li> </ul>	Week 9&10	10

	Week 11&12	10
<b>&amp; Clinical)</b>	Week 13	
	Week 16	04

Practical	Other:	Total
60		75
2		3

hrs per week. 5 hrs

## and Alignment with Assessment Methods

ing Strategy work together and are aligned.  
ectively articulate a consistent agreement

ing domains. Course learning outcomes are **learning outcomes which align with one or more** program learning outcomes integrated into outcome alignment. The program learning outcomes are incorporated into specific courses.

ered in the left column.

comes required in the appropriate learning  
supporting teaching strategies that fit and align  
ones. **Third**, insert appropriate assessment  
outcome. Each course learning outcomes,  
ably fit and flow together as an integrated  
ning outcomes are included in the course

in each domain.





<b>Cognitive Skills</b>	subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam – Theory	6	10%
2	First Midterm exam – Practical	7	15%
3	Second Midterm exam – Theory	13	10%
4	Second Midterm exam – Practical	14	15%
5	Topic Presentation/logbook	1-15	10%
6	Final exam – Practical	15	20%
7	Final exam – Theory	16	20%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

**Students can meet the Respective faculty member on their office hour.**

## E. Learning Resources

1. List Required Textbooks
  - ❖ Therapeutic Exercise: Foundations and Techniques by Carolyn Kisner, Lynn Allen Colby, Lynn Allen Colby, F. A. Davis Company
  - ❖ Therapeutic Exercise: From theory to practice by Micheal Higgins, F.A Davis company
2. List Essential References Materials (Journals, Reports, etc.)
  - ❖ Principles of Exercise therapy by M.Dena Gardinar , Fourth edition
  - ❖ Therapeutic Exercise: Foundations and Techniques by Carolyn Kisner, Lynn Allen Colby, Lynn Allen Colby, F. A. Davis Company
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
  - ❖ Therapeutic Exercise: Foundations and Techniques by Carolyn Kisner, Lynn Allen Colby, Lynn Allen Colby, F. A. Davis Company.
  - ❖ Principles of Exercise therapy by M.Dena Gardinar , Fourth edition
  - ❖ Therapeutic exercise: Moving toward function by Lori thein Brody
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)





<ul style="list-style-type: none"> <li>• Efficient &amp; effective use of teaching methods</li> <li>• Easy &amp; illustrative examples</li> </ul>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"> <li>• Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</li> <li>• Matrix – Mapping</li> <li>• Peer review / department council committee review</li> </ul>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none"> <li>• Continuous evaluation of the students during the term, and frequent updating of the course content</li> </ul>

**Faculty or Teaching Staff: Ms. Nivedita.P.Kashyap**  
**Ms. Minaz.S.Shaikh**

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Course Coordinator: Ms. Minaz.S.Shaikh** **Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad** **Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**ELECTROTHERAPY-2  
RHPT 353**

## Course Specifications

Institution- <b>Majmaah University - College of Applied Medical Sciences</b> Date of Report-5/ 04/ 1436H
College/Department - <b>Department of Physical Therapy &amp; Health Rehabilitation</b>

### A. Course Identification and General Information

1. Course title and code: Electrotherapy – 2, RHPT 353			
2. Credit hours: 3(2+1+0)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Physical Therapy and Rehabilitation Health Program</b>			
4. Name of faculty member responsible for the course Course Coordinator : <b>Prof. Dr/ Amal Mohamed Abd El baky</b> Course Instructor : <b>Dr. Shaik Abdul Rahim</b> (Section: 1554 / 1555)			
5. Level/year at which this course is offered - 5th level, 3 <sup>rd</sup> year			
6. Pre-requisites for this course (if any): RHPT 244 / Electrotherapy – 1			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: NA			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course?

The goal of this course is to enable the student to utilize the therapeutic modalities to develop a plan of care, recognizing and addressing the present clinical symptom (Holistic Approach) of various patients presenting with different clinical conditions. Prevention and management of pain, nerve injuries, physical impairments and disabilities

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

1. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc..)
2. Students will be encouraged to do the following:
  - a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
  - b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.
  - c. Conduct field visits to electrotherapy department in hospitals.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

This course includes types of electrical currents used to raise electrical nerve, muscle and physiological effects and therapeutic uses in addition to the risks and preventive measures and students are trained on how to use electrotherapeutic modalities. It also includes physiological effects of hydrotherapy, its uses, dangers, and preventive measures in addition to ways of using water treatment devices, students are trained in the use of these devices.

### 1. Topics to be covered

List of Topics	No. of Weeks	Contact Hours
<b>Unit - 1: Introduction to low frequency currents</b> <ol style="list-style-type: none"> <li>a. Key concepts in Electrotherapy / Electro physical agents</li> <li>b. Classification of frequencies – Low, medium, high</li> <li>c. Electric current / Electricity – Definition, types, Potential, Capacitance, Characteristics of charged body, Therapeutic uses of electricity, General precaution, Dangers, Shock &amp; it's types, Safety measures.</li> <li>d. List of electro physical agents targeting low frequency currents &amp; orientation to electrotherapy lab</li> </ol>	02	08
<b>Unit - 2: Faradic/Bi-phasic current</b> <ol style="list-style-type: none"> <li>a. Principle , physiological, therapeutic effects, indications, contraindication, parameter selection, method of application</li> <li>b. Practicum: technique of application of faradic stimulation to Bell's palsy, Faradic Foot Bath, Re-education of weak pelvic floor muscles, Faradism under pressure upper &amp; lower limb and</li> </ol>	02	08

Quadriceps's inhibition		
<b>Unit - 3: Galvanic current / Direct current / Interrupted Direct Current (IDC)</b> a.Principle, physiological, therapeutic effects, indications, contraindication, parameter selection, method of application b.Practicum: technique of application of direct current to de-nervated muscles, foot drop, wrist drop, including some major peripheral nerve lesions in upper and lower limb.	01	04
<b>Unit - 4: Transcutaneous Electrical Nerve Stimulation (TENS)</b> a.Principle , physiological, therapeutic effects, indications, contraindication, method of application b. Practicum: technique of application of (TENS)	02	08
<b>Unit - 5: Iontophoresis</b> a.principle, physiological, therapeutic effects, indications, contraindication, method of application b. Practicum: technique of application of Iontophoresis	01	04
<b>Unit - 6: High Voltage Galvanic Stimulation Current (HVGSC)</b> a. principle , physiological, therapeutic effects, indications, contraindication, method of application b. Practicum: technique of application of HVGS current	01	04
<b>Unit – 7: Sinusoidal current</b> a. principle , physiological, therapeutic effects, indications, contraindication, method of application b. Practicum: technique of application sinusoidal current.	01	04
<b>Unit – 8: Diadynamic current</b> a. principle , physiological, therapeutic effects, indications, contraindication, method of application b. Practicum: technique of application diadynamic current.	01	04
<b>Unit - 9: Medium frequency currents:</b> a.Russian current, Interferential current: principle , physiological, therapeutic effects, indications, contraindication, method of application b. Practicum : Russian current, Interferential Current (IFC)	02	08

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30	.....	.....	30	.....	60
Credit	2	.....	.....	1	.....	3

3. Additional private study/learning hours expected for students per week.

2 hours

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
<b>A2.1</b>	The student will be able to <b>recall</b> the basic knowledge related to principles, concepts, & the basic functions of electrotherapy agents (Low & Medium frequency modalities) used in physiotherapy.	Lecture, class discussion by teacher, Textbook assignments open textbook study, homework & practice, summarizing & note taking, daily re-looping of previously learned material.	Theoretical exam (midterm & final exam, Quizzes – using rubrics)
<b>B</b>	<b>Cognitive Skills</b>		
<b>B2.1</b>	The students will be able to <b>analyze</b> problems, take decisions and	Case method,	Theoretical

<b>B2.2</b>	reflect critically on the justifications for assessment findings, while aiming to achieve the individual's treatment goals.  The student will be able to <b>design</b> a program of treatment using Low & Medium frequency modalities.	educational films, & pod cats.	exam (midterm, final exam - case study, & Quizzes- using rubrics,)
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
<b>C1.1</b>	The student will be able to <b>demonstrate</b> collecting, organizing information and ideas and to convey those ideas clearly and fluently by writing & effectively interacting with their colleagues in an ethical manner.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Individual/Group Assignments – Using RUBRICS
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
<b>D1.1</b>	The students will be able to <b>operate</b> to think, write and speak effectively and demonstrate respectful, positive and culturally appropriate behaviour while communicating with others.	Recitation, debate, use of technology & instructional resources, faculty website, e-mail	Topic Presentation – Using RUBRICS
<b>E</b>	<b>Psychomotor</b>		
<b>E1.1</b>	The student will be able to <b>operate</b> safely the application of low and medium frequency modalities used in physiotherapy	Teacher demonstration, Nonlinguistic representation, Hands on, active participation	Practical exam – Using RUBRICS

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize

<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quiz 1 + 2	During the course	10%
2	First Midterm Exam - Theory	7	10%
3	First Midterm Exam - Practical	6	10%
4	Second Midterm Exam - Theory	12	10%
5	Second Midterm Exam - Practical	11	10%

6	Assignment	During the course	05%
7	Oral presentation	During the course	05%
8	Final Exam – Practical	15	10%
9	Final Exam – Theory	16	30%

#### D. Student Academic Counseling and Support

Day	Dr. Shaik Abdul Rahim
Sunday	8-10 am
Monday	8-10 am
Tuesday	8-10 am
Wednesday	8-10 am
Thursday	-----

#### E. Learning Resources

1. List Required Textbooks <ul style="list-style-type: none"> <li>Therapeutic Electrophysical Agents – Evidence based practice, 2<sup>nd</sup> edition - 2010, Alain-Yvan Belangaer, Lippincott Williams.</li> <li>❖ Electrotherapy simplified : by Nada,2008</li> </ul>
2. List Essential References Materials (Journals, Reports, etc.) <ul style="list-style-type: none"> <li>Therapeutic Modalities in Rehabilitation, 3<sup>rd</sup> Edition, Author –William E. Prentice. McGraw-Hill</li> <li>Electrotherapy Explained : Principles and Practice; V Robertson, A Ward, J Low and A Reed, Elsevier</li> <li>○ Clayton's Electrotherapy: Theory and Practice <u>Angela Forester MCSP DipTP</u>, 9 th edition, Bailliere Tindall.</li> </ul>
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc) <ul style="list-style-type: none"> <li>Electrotherapy: Evidence based practice by Watson, 12<sup>th</sup> edition.</li> <li>Practical electrotherapy: your guide to optimal treatment. Jan Bjordal, latest edition, prima books.</li> <li>Physical Agents: Theory And Practice by Barbara J. Behrens and Susan L. Michlovitz (Paperback - July 16, 2005)</li> <li>Principles and Practice of Electrotherapy by Joseph Kahn (Paperback - Jan. 1994).</li> <li>❖ Clinical Electrotherapy (3rd Edition) by Roger M. Nelson, Dean P. Currier, and Karen W. Hayes (Paperback - Feb. 15, 1999)</li> <li>❖ American Journal of physical therapy</li> <li>❖ Journal of physiotherapy</li> </ul>
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.) <ul style="list-style-type: none"> <li><a href="http://www.electrotherapy.org">http://www.electrotherapy.org</a></li> </ul>



- <http://www.csp.org.uk/tagged/electrotherapy>
- <http://www.electrotherapy.org.in>
- [www.apta.org](http://www.apta.org)
- [www.physio-med.com](http://www.physio-med.com)
- [www.medsourceusa.com](http://www.medsourceusa.com)
- [www.books.google.co.in](http://www.books.google.co.in)
- [www.amazon.co.uk/electrotherapy](http://www.amazon.co.uk/electrotherapy)
- [www.en.wikipedia.org/wiki/electrotherapy](http://www.en.wikipedia.org/wiki/electrotherapy)
- [www.wcpt.org](http://www.wcpt.org)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

2. Computing resources (AV, data show, Smart Board, software, etc.)

❖ Internet in lecture hall and lab

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

More number of equipments for the students to practice as following;

- SONOSTIM
- TENS
- Iontophoresis
- Intermittent direct current – IDC unit

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- a) Asking question before, during and after each lecture
- b) Provision of appraisal form to the students & to rectify changes if any – done through HOD consent
- c) Through evaluation of the course by student at their web site

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

Frequent feedback from the students & clarification of doubts now & then feedback from the students oral or written about the lecture by the supervisor or HOD of the department & later to discuss the issues if any with the concerned staff.

<ul style="list-style-type: none"> <li>a) 3 Processes for Improvement of Teaching</li> <li>b) Attending frequent workshops in Saudi Arabia for update of latest trends in the field of physical therapy</li> <li>c) Efficient &amp; effective use of teaching methods (RUBRICS and other related form of teaching methods)</li> <li>d) Implementation of D2L learning management system</li> <li>e) Planning to make assignments &amp; tutorial by webinars</li> <li>f) Easy &amp; illustrative examples</li> </ul>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"> <li>a) Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</li> <li>b) Matrix – Mapping</li> <li>c) Peer review / department council committee review</li> </ul>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none"> <li>a. Continuous evaluation of the students during the term, and frequent updating of the course content.</li> <li>b. Planning to make exams online</li> <li>c. Planning to conduct online surveys</li> </ul>

**Faculty or Teaching Staff: Dr. Shaik Abdul Rahim**

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Course Coordinator: Prof .Dr/ Amal Mohamed Abd El baky**

**Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad, Head, Dept. Physical Therapy**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**RHPT 354 – NEUROPHYSIOLOGY  
1435-1436**

## Course Specifications

Institution- <b>Majmaah University - College of Applied Medical Sciences</b> Date of Report-19/ 04/ 1436H
College/Department - <b>Department of Physical Therapy &amp; Health Rehabilitation</b>

### A. Course Identification and General Information

1. Course title and code: Neuro Physiology – RHPT 354			
2. Credit hours – 3(2+0+1)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Physical Therapy and Rehabilitation Health Program</b>			
4. Name of faculty member responsible for the course Course Coordinator : Dr. Sheik Abdulrahim Course Instructors : Mrs.Rashmi.A.Saibannavar			
5. Level/year at which this course is offered - Level – 6/ 3rd Year			
6. Pre-requisites for this course (if any)			
7. Co-requisites for this course (if any)			
8. Location if not on main campus NA			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course?

The main aim of this course is to understand the physiological mechanisms underlying the normal functioning of the central and peripheral nervous systems, from applied and practical viewpoints. In addition, understand nerve conduction and EMG applications. To appreciate the logical consequences of derangement of these systems, by understanding the functional abnormalities which accompany examples of lesions that can involve these systems. The basic principles of physical examination of the nervous system in general, and cranial nerves in particular.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

1. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)
2. Students will be encouraged to do the following:
  - a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
  - b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

Brain mechanisms in sensation and perception are analyzed in detail for vision, hearing and touch, and for the position sense arising from muscles, joints and the vestibular apparatus. The sensorimotor mechanisms responsible for the control of fine movement and postural regulation are also studied at different levels of the nervous system, from the sensory and motor nerves within muscles through to the highest levels of cerebral cortical function. Segments are also included on nerve transmitters and neuromodulators; neural mechanisms certain higher functions, eg language and memory; and nervous system plasticity.

1. Topics to be covered		
List of Topics	No. of Weeks	Contact Hours
1. Functional Organization of Nervous System: <ul style="list-style-type: none"> <li>➤ The major central nervous system control centers and relate them to their functional activity or lack of activity.</li> </ul>	1	4
2. Electrophysiology of Nervous system: <ul style="list-style-type: none"> <li>➤ Production &amp; conduction of electrical impulses</li> </ul>	2	8

<ul style="list-style-type: none"> <li>➤ Synapse</li> <li>➤ Associated electrophysiological changes.</li> </ul>		
<p>3. Somatosensory System:-</p> <ul style="list-style-type: none"> <li>➤ List the sub modalities of discriminative touch,</li> <li>➤ Describe functional organization at all levels</li> <li>➤ Sub modalities served by the dorsal column – medial lemniscal and equivalent components of the trigeminal system &amp; contrast the proprioceptive pathways to the cerebellum with that to the cerebral cortex.</li> </ul>	2	8
<b>In course examination 1(Mid Term Exam – Theory &amp; Practical)</b>	Week 6	
<p>4. The vestibular system: -</p> <ul style="list-style-type: none"> <li>➤ Describe the vestibular apparatus</li> <li>➤ Its connections and physiological function.</li> <li>➤ Describe and explain: vestibular nystagmus, vertigo and motion sickness.</li> </ul>	1	4
<p>5. Neurophysiology of Pain:</p> <ul style="list-style-type: none"> <li>➤ describe functional organization at all levels and sub modalities served by the anterolateral system</li> <li>➤ The equivalent components of the spinal trigeminal system</li> <li>➤ describe the mechanism of referred pain of visceral origin</li> </ul>	1	4
<p>6. Cortical Motor Areas, and the Major Descending Motor Pathways:</p> <ul style="list-style-type: none"> <li>➤ Enumerate the cortical motor areas (M1, M2, M3 and Parietal lobe) and Describe their locations and functions.</li> <li>➤ Appreciate what is meant by upper and lower motor neurons, and the role of the medial and lateral spinal motoneuron groups in execution of movement.</li> <li>➤ Explain the function, origin and termination of the corticobulbar, corticospinal and extrapyramidal (vestibulospinal, rubrospinal , reticulospinal and tectospinal ) tracts.</li> </ul>	2	8
<p>7. Upper and lower motor neuron lesions:</p> <ul style="list-style-type: none"> <li>➤ Compare and contrast upper and lower motor neuron lesions. Correlate the motor features of Brown-Sequard syndrome with its sensory features that were previously studied in the context of sensory lesions.</li> <li>➤ Hemiplegia: Give few examples of causes of hemiplegia, and provide clinical features of such a lesion</li> </ul>	2	8
<b>In course examination II(Mid Term Exam – Theory &amp; Practical)</b>	Week 12	

8. The Basal Ganglia: ➤ Enumerate the basal ganglia and describe their main circuits, neurotransmitters and functions	1	4
9. The Cerebellum: ➤ Describe the functional divisions of the cerebellum (vestibulocerebellum, spinocerebellum and cerebrocerebellum).	1	4
<b>Final Theory examination</b>	Week15	

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	15			30		45
Credit	1			2		3

3. Additional private study/learning hours expected for students per week.	5 hrs/Week
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
<b>1.1</b>	<p>The student will able to <b>describe</b> key regions and general functions of the nervous system and describe the common neurological conditions associated with them.</p> <p>The student will be able to <b>record</b> the basic electrophysiological and chemical regulation of the nervous system.</p> <p>The student must be able to <b>outline</b> the components of the peripheral nervous system and the underlying mechanisms regulating the sensory, motor and visceral functions</p>	Lecture, Lecture -demonstration & class discussion by teacher, Textbook assignments open textbook study, homework & practice, summarizing & note taking, daily re-looping of previously learned material.	Theoretical Exams (MCQ, SAQ), Quiz & Assignment – using RUBRICS
<b>2.0</b>	<b>Cognitive Skills</b>		
<b>2.1</b>	The student will able to <b>interpret</b> the various information for systemic inquiry.	Case method, use of motion pictures, educational films, pod cats & video tapes	Scenario based question, Theoretical Exams (SAQ/Case study), Quiz & Assignments- using RUBRICS.
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
	<b>NA</b>		
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
	<b>NA</b>		
<b>5.0</b>	<b>Psychomotor</b>		
<b>5.1</b>	The student will able to <b>perform</b> safely & systematically the required tests & measures for the client assessment & procedures appropriately within the scope of physical therapy practice	Demonstration to the students by the Lecturer	Practical exam



### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

#### **Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam – Theory	6/7	10%
2	Midterm exam 1 --Practical	7	10%
3	Second Midterm exam – Theory	11/12	10%
4	Midterm exam 2 --Practical	12	10%
5	Assignment	Throughout course	5%
6	Quiz	Throughout course	10%
7	Final exam – Practical	15	10%
8	Final exam -- Theory	16	30%
9	Log book	Throughout course	5%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Day	Mrs. Rashmi Saibannavar	
Sunday	11-1.30 a.m	
Monday	12.30- 1.30	
Tuesday	--	
Wednesday	--	
Thursday	12.30- 1.30	

## E. Learning Resources

## 1. List Required Textbooks

- ❖ Neuroscience: Fundamentals for Rehabilitation. 4e Laurie Lunde Ekman Elsevier 2012

## 2. List Essential References Materials (Journals, Reports, etc.)

- ❖ Clinical Neuroscience for Rehabilitation Margaret Schenkman, James Bowman, Robyn Gisbert and Russell Butler Elsevier 2012

### 3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- ❖ Text book of medical Physiology, Guyton & Hall Elsevier 2012
- ❖ American Journal of physical therapy

❖ Journal of physiotherapy
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)
❖ <a href="http://www.apta.org">www.apta.org</a>
❖ <a href="http://www.physio-med.com">www.physio-med.com</a>
❖ <a href="http://www.medsourceusa.com">www.medsourceusa.com</a>
❖ <a href="http://www.books.google.co.in">www.books.google.co.in</a>
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none"> <li>❖ Lecture room suitable for 25 students provided with smart board</li> <li>❖ Lab for practical sessions</li> </ul>
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none"> <li>❖ One computer in the classroom,</li> <li>❖ Projector. (In classroom)</li> <li>❖ Smart board. (In classroom)</li> <li>❖ Data show. (In classroom)</li> </ul>
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) <ul style="list-style-type: none"> <li>❖ Knee hammer</li> <li>❖ Tuning fork</li> </ul>

## G Course Evaluation and Improvement Processes

1	Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> <li>a) Asking question before, during and after each lecture</li> <li>b) Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</li> <li>c) Through evaluation of the course by student at their web site</li> </ul>
2	Other Strategies for Evaluation of Teaching by the Program/Department Instructor <p>Frequent feedback from the students &amp; clarification of doubts now &amp; then feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff.</p>
	<ul style="list-style-type: none"> <li>a) 3 Processes for Improvement of Teaching</li> <li>b) Attending frequent workshops in Saudi Arabia for update of latest trends in the field of physical therapy</li> <li>c) Efficient &amp; effective use of teaching methods (RUBRICS and other related form of teaching methods)</li> </ul>

<p>d) Implementation of D2L learning management system</p> <p>e) Planning to make assignments &amp; tutorial by webinars</p> <p>f) Easy &amp; illustrative examples</p>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <p>a) Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</p> <p>b) Matrix – Mapping</p> <p>c) Peer review / department council committee review</p>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <p>a. Continuous evaluation of the students during the term, and frequent updating of the course content.</p> <p>b. Planning to make quizzes &amp; Assignments online</p>

**Faculty or Teaching Staff : Mrs.Rashmi.A.Saibannavar**

**Signature:** \_\_\_\_\_ **Date Report Completed:** 19/ 04/ 1436H

**Course Coordinator: Mrs.Rashmi.A.Saibannavar** **Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad** **Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)  
Human Biomechanics  
(327 PHT)**

## Course Specifications

Institution	<b>Al Majmaah University</b>	Date of Report	5/4/1436
College/Department	<b>College of Applied Medical science / Physical Therapy Department</b>		

### A. Course Identification and General Information

1. Course title and code: <b>Human Biomechanics (PHT 327)</b>			
2. Credit hours <b>3 hours credits/week</b> Lecture: <b>2h</b> Practical: <b>1h</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Physical therapy program</b>			
4. Name of faculty member responsible for the course : <b>Dr: Walaa Sayed Mohammad</b>			
5. Level/year at which this course is offered <b>for 5th level/ 3rd year</b>			
6. Pre-requisites for this course (if any) <b>Introduction to Biomechanics (226-PHT)</b>			
7. Co-requisites for this course (if any)			
8. Location if not on main campus <b>None</b>			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

<p>1. What is the main purpose for this course? Upon the completion of this course, students should be able to Build up knowledge about the normal kinematic and kinetic of different joints of the lower extremity. Also about the mechanical analysis of the normal and abnormal human motion as well as an analysis of gait.</p>
<p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <ol style="list-style-type: none"> <li>1. Updating course material.</li> <li>2. Updating references used.</li> <li>3. Updating assessment and changes questions .</li> </ol>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached).

This course deals with the study of human and mechanical movement of the human body, mechanical analysis of the normal and abnormal human motion as well as an analysis of gait.

1. Topics to be Covered		
Topics to be Covered	No of Weeks	Contact hours
<p><b>- Gait cycle:</b></p> <ul style="list-style-type: none"> <li>• Definition of gait.</li> <li>• Prerequisites of gait.</li> <li>• Phases &amp; intervals of gait cycle.</li> </ul>	1 <sup>st</sup> & 2 <sup>nd</sup> weeks	8
<p><b>Kinematic analysis of gait:</b></p> <ul style="list-style-type: none"> <li>○ Spatial and temporal parameters of gait.</li> <li>○ Joint angles measurement during gait.</li> <li>○ Determinants of gait.</li> </ul> <p><b>Kinetic analysis of gait</b></p> <ul style="list-style-type: none"> <li>○ Ground reaction force vector (GRFV) at hip, knee, ankle joints.</li> <li>○ Muscle forces counterbalancing GRFV.</li> </ul>	3 <sup>rd</sup> & 4 <sup>th</sup> Weeks	8
<p><b>Pathomechanics of gait</b></p> <ul style="list-style-type: none"> <li>○ The main causes of pathological gait.</li> <li>○ Different gait deviations associated with different pathological conditions.</li> </ul>	5 <sup>th</sup> Week	4

-In-Course Exam I (Theoretical Midterm Exam).	6 <sup>th</sup> Week	
<b>1- <u>Biomechanics of hip joint</u></b> <b>A. <u>Kinematics of hip joint</u></b> <ul style="list-style-type: none"> <li>• Bony articulation</li> <li>• Angles within the hip joint</li> <li>• Ligaments of the hip joint</li> <li>• Muscles of the hip joint</li> <li>• Function of hip joint</li> <li>• Stability of hip joint (closed&amp; loosed pack position).</li> <li>• Surface motion of the hip joint (closed &amp; open kinematic chain).</li> <li>• Weight transmission through hip joint.</li> </ul> <b>B. <u>Kinetics of hip joint</u></b> <ul style="list-style-type: none"> <li>• Statics</li> <li>• Methods for determining joint reaction force.</li> <li>• Pathomechanics of hip joint</li> </ul>	7 <sup>th</sup> & 8 <sup>th</sup> weeks	8
<b><u>Biomechanics of knee joint</u></b> <b>A. <u>Kinematics of knee joint</u></b> <ul style="list-style-type: none"> <li>• Bony articulation</li> <li>• Angles within the knee joint</li> <li>• Menisci of the knee</li> <li>• Ligaments of the knee joint</li> <li>• Muscles of the knee joint</li> <li>• Function of knee joint</li> <li>• Stability of knee joint( closed&amp; loosed pack position)</li> <li>• Surface motion of the joint (closed &amp; open kinematic chain )</li> <li>• Weight transmission through knee joint</li> </ul> <b>B. <u>Kinetics of knee joint</u></b> <ul style="list-style-type: none"> <li>• Statics</li> <li>• Methods for determining joint reaction force</li> <li>• Pathomechanics of knee joint</li> </ul>	9 <sup>th</sup> week	4



<b><u>Biomechanics of ankle joint</u></b>  <b>A. <u>Kinematics of ankle joint</u></b> <ul style="list-style-type: none"> <li>• Bony articulation</li> <li>• Ligaments of the ankle joint</li> <li>• Muscles of the ankle joint</li> <li>• Function of ankle joint.</li> </ul> <b>B. <u>Biomechanics of foot</u></b> <ul style="list-style-type: none"> <li>• Structure of foot</li> <li>• Arches of foot</li> </ul> Load transmission through foot	10 <sup>th</sup> week	4
<b><u>Biomechanics of Shoulder Complex</u></b> <b>A. <u>Components of the Shoulder Complex</u></b> <b>B. <u>Integrated Function of the Shoulder</u></b>	11 <sup>st</sup> & 12 <sup>nd</sup> weeks	8
<b>-In-Course Exam II (Theoretical midterm )</b>	13 <sup>th</sup> Week	
<b><u>Biomechanics of Elbow Complex</u></b> <ul style="list-style-type: none"> <li>• Mobility and Stability: Elbow Complex</li> <li>• Functional Activities</li> </ul>	14 <sup>th</sup> Week	4
<b><u>Biomechanics of vertebral Complex</u></b> <ul style="list-style-type: none"> <li>• Biomechanics of the spine.</li> <li>• Effect of different loads on spine stability.</li> </ul>	15 <sup>th</sup> Week	4
<b>-Final Exam</b>	16 <sup>th</sup> week	

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30		30			60
Credit	2		1			3

3. Additional private study/learning hours expected for students per week.	2
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
A.0	Knowledge		
A.2.1@	To describe the perquisites and sub phases of gait cycle	1. Lecture using a. Power point presentation b. Smart board. c. Illustrative schematic diagrams 2. Small group discussion	1. Oral exam 2. Written exam
A.2.2@	To recall normal kinematic of different joints of the lower extremity and upper extremities.		
B.0	Cognitive Skills		
B.2.1@	To differentiate between type of muscular contraction on different joints during gait cycle.	1. Lecture using a. Power point presentation b. Smart board. c. Illustrative schematic diagrams 2. Small group discussion	1. Practical exam 2. Assignment 3. Written exam
B.2.2@	To determine the forces that act on joints during static and dynamic situations.		
B.2.3@	To analyze gait deviations and upper extremity movement abnormalities in some pathological cases.		
C.0	Interpersonal Skills & Responsibility		
C.1.1@	To work independently and as in groups including leadership responsibilities.	1. Small group discussion 2. Lecture. 3. Lab.	1. Practical exam 2. Assignment
D.0	Communication, Information Technology, Numerical		
D.1.1@	To calculate the joint reaction force of the lower extremity joints	1. Mathematical calculation. 2. Student practical measurement.	1. Practical exam 2. Case study question.
D.1.2@	To interpret the normal and the abnormal load forces affecting the spine.		
E.0	Psychomotor		
E.1.1@	To illustrate biomechanical normal kinematics of joints.	1. Lecture. 2. Lab. 3. Small group discussion.	1. Practical exam 2. Written exam
5.2			

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write

<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quizzes	4 <sup>th</sup> & 10 <sup>th</sup> weeks	10 %
2	Logbook	7 <sup>th</sup> & 13 <sup>th</sup> weeks	10%
3	Theoretical mid term	7 <sup>th</sup> & 13 <sup>th</sup> weeks	30%
4	Practical mid term	7 <sup>th</sup> week	10%
5	Final practical exam	15 <sup>th</sup> week	15%
6	Final Theoretical exam	16 <sup>th</sup> week	25%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

10 hours per week

#### E. Learning Resources

##### 1. List Required Textbooks

- Perry J, Burnfield J. (2010) "Gait Analysis: Normal and Pathological Function". 2nd ed., Slack Incorporated.
- Norkin CC and Levangie PK (2011) "Joint structure and function. A comprehensive Analysis" 5th ed., F. A. Davis Company; USA.

##### 2. List Essential References Materials (Journals, Reports, etc.)

- Donald A. (2009) "Kinesiology of the Musculoskeletal System Foundations for Physical Rehabilitation".
- Dvir, Z. (2000) "Clinical Biomechanics". Churchill Livingstone, USA.

##### 3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- Frankel VH, Nordin M (2004) "Basic biomechanics of the skeletal system". published by Herry Kimton, London, USA Lea & Febiger, Philadelphia.
- Gorwitzkee BA, Milner M (2006) "Understanding the scientific bases of human movement " 2nd Edition, Williams and Wilkins, Baltimore, London.
- Le Veau BF (1993) "Biomechanics of human motion" 3rd Edition, WB Saunders company, Hartcourt Brace, Jovanovitch Inc: Philadelphia USA..

##### 4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

Some medical webs such as

1. Biomechanics yellow pages - <http://www.isbweb.org>.
2. Biomechanics world wide – <http://www.per.valberta.ca/Biomechanic>.
3. [www.Pubmed.com](http://www.Pubmed.com)
4. [www.BMJ.com](http://www.BMJ.com)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

## Using power point program

### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
  - a. Lecture room (25 seats)
  - b. Practical lab (10 seats)
  - c. Motion analysis Lab.

2. Computing resources (AV, data show, Smart Board, software, etc.)
  - a. Data show device
  - b. Smart Board

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
  - a. Each member need laptop
  - b. Classroom and Practical lab require wireless network

### G Course Evaluation and Improvement Processes

#### 1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Exams
- Logbook
- Web based online student questionnaire at the end of semester.

#### 2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

- a. Faculty Peer review
- b. Student feedback.

#### 3 Processes for Improvement of Teaching

- Course report analysis, feedback from all the stakeholders (Peer, Students, teachers, quality unit etc).
- Implementation and regulation of unified course outcomes and class objectives in both

<p>male &amp; female sections.</p> <ul style="list-style-type: none"><li>• Unified assessment methods especially for practical are based on rubrics.</li><li>• Involvement of faculty members in various professional activities by attending frequent workshops/CME etc. for continuous up gradation of knowledge &amp; skills</li></ul>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"><li>• Peer-review by faculty member of another department</li></ul>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none"><li>• Students feedback analysis</li><li>• Course report analysis</li><li>• Program report</li></ul> <p>Based on these reports the department makes the strategic action plan for each semester</p>

**Faculty or Teaching Staff: Dr. Walaa Mohammad**

Signature: W.sayed

**Date Report Completed: 5/4/1436**

**Course Coordinator: Dr. Walaa Mohammad**

Signature: W.sayed

**Received by: Dr. Fuzail Ahmed**

**Department Head**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_





**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

## Course Specifications

Institution: Majmaah University	Date of Report: 3-7-2015
College/Department: Department of Physical Therapy & Health Rehabilitation	

### A. Course Identification and General Information

1. Course title and code: Hydrotherapy, RHP-362.			
2. Credit hours: 2(1+1+0)			
3. Program(s) in which the course is offered: Physical Therapy and Rehabilitation Health Program (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course <div style="display: flex; justify-content: space-between;"> <span>Course Coordinator : Dr: Intsar Salim Abd El-Aziz Waked</span> <span>(Section:156)</span> </div> <div style="display: flex; justify-content: space-between;"> <span>Course Instructors 1. Mr.Faizan Zaffar Kashoo</span> <span>(Section:896)</span> </div>			
5. Level/year at which this course is offered: Level – 5/ 3rd Year			
6. Pre-requisites for this course (if any): PHT 222.			
7. Co-requisites for this course (if any): PHT 222			
8. Location if not on main campus: NA			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course?
The ultimate aim of the course is to build up knowledge and skills necessary for the utilization of hydrotherapy modalities and to be capable of using advanced electronic machinery in conducting different techniques of hydrotherapy necessary for competent practice and lifelong professional development.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
<p>A. The Lectures should also be a part of updating their knowledge through continuous medical education (CME), periodically in rotational basis.</p> <p>B. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc..)</p> <p>Students will be encouraged to do the following:</p> <p>A. Acquiring knowledge through the Internet, journals and verifying the other information resources.</p> <p>B. Sharing the acquired knowledge with critical/lateral thinking &amp; clinical reasoning.</p>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

This course provides the students with using of the hydrotherapy modalities and their practical application for therapeutic purposes with stress on therapeutic advantages, disadvantages, indications, contraindications, precautions and safety rules.

List of Topics	No. of Weeks	Contact Hours
1. Introduction to hydrotherapy & Physical proprieties of water	1	3
2. Physiological effects of water	1	3
3. Therapeutic uses of Hydrotherapy	1	3
4. Indication, contraindication, and adverse effects of Hydrotherapy	1	3
5. Physical principles of underwater ex.	1	3
6. Design and safety environment for Pool therapy	1	3
7. Clinical application of hydrotherapy in certain diseases or disorders	1	3
8. Whirlpool Tank - The Hubbard tank	1	3

9. Hydro-collator - Contrast Bath	2	6
10. Paraffin wax	1	3
11. Cryotherapy	2	6

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30			30		60
Credit	30			15		45

3. Additional private study/learning hours expected for students per week.	2 hrs.
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A2.1	The student will be able to describe the principles of physical laws governing different hydrotherapy application.	Lecture, Lecture - demonstration & class discussion by teacher, Text book assignments, open text book study, homework & practice, summarizing & note taking, daily re-looping of previously learned material	Written Exams using - (MCQ, SAQ) & Quiz (Oral) – using RUBRICS
A2.2	The student will be able to reproduce basic concepts, theories while applying different hydrotherapeutic modalities to patients	Lecture, Lecture - demonstration & class discussion by teacher, Text book assignments, open text book study, homework & practice, summarizing & note taking, daily re-looping of previously learned material	Written Exams using - (MCQ, SAQ) & Quiz (Oral) – using RUBRICS
<b>B</b>	<b>Cognitive Skills</b>		
B2.1	The student will be able to analyze the patients' needs and develop the appropriate hydrotherapy modality for him.	Case method, use of motion pictures, educational films, pod cats & video tapes	Written Exams using - (SAQ, Case Study) & Quiz (Oral) – using RUBRICS
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
C1.1	Student will be able to show a high standards of ethical practice including interactions with patients, peers and other health care personnel	Case method, use of motion pictures, educational films, pod cats & video tapes	Group Assignments & Topic Presentation
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
	D1. The students will develop the capacity to think, write and speak effectively and demonstrate respectful, positive and culturally appropriate behavior while communicating with others.		
D1.1	Student will be able to assess the knowledge concerning hydrotherapy techniques from the internet.(Journals, Articles, etc..)	Case method, use of motion pictures, educational films, pod cats & video tapes	Assignments, Topic Presentation  Group discussion
<b>E</b>	<b>Psychomotor</b>		
E1.1	Student will be able to apply different hydrotherapy	Teacher demonstration,	Practical exam Using



	modalities for patients with different diseases.	Nonlinguistic representation (Physical models, Kinesthetic representations), Simulation/ Role playing, Hands on, active participation	RUBRICS LOG book
E1.2	The student will able to manipulate different hydrotherapeutic equipment's.	Teacher demonstration, Nonlinguistic representation (Physical models, Kinesthetic representations), Simulation/ Role playing, Hands on, active participation	Practical exam Using RUBRICS LOG book

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quizzes	Throughout the course	10%
2	First Midterm exam - Theory	6	10%
3	First Midterm exam - Practical	6	10%
4	Second Midterm exam - Theory	12	10%
	Second Midterm exam - Practical	12	10%
5	Assignments	Throughout the course	05%
6	Practical Log Book	Throughout the course	05%
7	Final Practical Exam	15	20%
8	Final exam - Theory	16	20%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)		
Day	Dr. Intsar	Mr. Faizan Zaffar Kashoo
Sunday	12-2	12 – 2:0 pm
Monday		
Tuesday	8-10	10 – 12 am
Wednesday	10-2	8-12 am
Thursday		

#### E. Learning Resources

1. List Required Textbooks
. Physical agents in rehabilitation: From research to practice. Michel Cameron. 3rd edition, Saunders
2. List Essential References Materials (Journals, Reports, etc.)
<ul style="list-style-type: none"> <li>a. <a href="http://www.electrotherapy.org.in">http://www.electrotherapy.org.in</a></li> <li>b. <a href="http://www.electrotherapy.org">http://www.electrotherapy.org</a></li> <li>c. <a href="http://www.apta.org">www.apta.org</a></li> <li>d. <a href="http://www.physio-med.com">www.physio-med.com</a></li> <li>e. <a href="http://www.medsourceusa.com">www.medsourceusa.com</a></li> <li>f. <a href="http://www.books.google.co.in">www.books.google.co.in</a></li> <li>g. <a href="http://www.amazon.co.uk/electrotherapy">www.amazon.co.uk/electrotherapy</a></li> <li>h. <a href="http://www.en.wikipedia.org/wiki/electrotherapy">www.en.wikipedia.org/wiki/electrotherapy</a></li> </ul>
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
<ul style="list-style-type: none"> <li>a. Hydrotherapy: Principles &amp; Practice, 2nd Edition, Author: Margaret Reid. Butterworth</li> <li>b. Laboratory Manual for Physical Agents: Theory &amp; Practice, 2nd Edition, Barbara J. Behrens.</li> <li>c. Practical electrotherapy: your guide to optimal treatment. Jan Bjordal, latest edition, prima books.</li> <li>d. Physical Agents: Theory And Practice by Barbara J. Behrens and Susan L. Michlovitz (Paperback - July 16, 2005)</li> <li>e. Therapeutic Modalities in Rehabilitation, 3rd Edition, Author –William E. Prentice. McGraw-Hill</li> </ul>
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)
<ul style="list-style-type: none"> <li>a. <a href="http://www.electrotherapy.org">http://www.electrotherapy.org</a></li> <li>b. <a href="http://www.csp.org.uk/tagged/electrotherapy">http://www.csp.org.uk/tagged/electrotherapy</a></li> </ul>
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required





<p>Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)</p> <p>Lecture room suitable for 25 students.</p> <p>Separate Practical lab suitable for 25 students. (With proper water input &amp; output drainage system, Partitions of the lab for the privacy to practice)</p>
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <p>One computer in the classroom, and another in the lab.</p> <p>Projector. (In both classroom and lab)</p> <p>Smart board. (In both classroom and lab)</p> <p>Data show. (In both classroom and lab)</p>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <p>One computer in the classroom, and another in the lab.</p> <p>Projector. (In both classroom and lab)</p> <p>Smart board. (In both classroom and lab)</p> <p>Data show. (In both classroom and lab)</p>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ol style="list-style-type: none"> <li>Asking question before, during and after each lecture</li> <li>Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</li> <li>Through evaluation of the course by student at their web site</li> </ol>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p> <p>Frequent feedback from the students &amp; clarification of doubts now &amp; then feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff.</p>
<p>3 Processes for Improvement of Teaching</p> <ol style="list-style-type: none"> <li>Attending frequent workshops in Saudi Arabia for update of latest trends in the field of physical therapy</li> <li>Efficient &amp; effective use of teaching methods (RUBRICS and other related form of teaching methods)</li> <li>Planning to make online student based training</li> <li>Planning to make tutorial by webinars</li> </ol> <p>Easy &amp; illustrative examples</p>



4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- a. Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.
- b. Matrix – Mapping
- c. Peer review / department council committee review

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- a. Continuous evaluation of the students during the term, and frequent updating of the course content.
- b. Planning to make exams online
- c. Planning to conduct online surveys

**Faculty or Teaching Staff: Mr.Faizan Zaffar Kashoo**

**Signature:** \_\_\_\_\_ **Date Report Completed:3-7-2015**

**Course Coordinator: Dr: Intsar Salim Abd El-Aziz Waked**

**Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad**

**Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**RHPT 363  
Second semester 1435-1436**

## Course Specifications

Institution	<b>Majma'ah University</b>	Date of Report <b>05- 04-1436</b>
College/Department: <b>College of applied Medical Sciences / Dept. Of Physical &amp; Health rehabilitation</b>		

### A. Course Identification and General Information

1. Course title and code: <b>MEDICAL MASSAGE - RHPT 363</b>			
2. Credit hours: <b>2 hours</b> (1 Theory & 1 Practical)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course: <b>Mr. Walaa Mohamed (Male Section) &amp; Mrs. Savitha Singh (Female Section).</b>			
5. Level/year at which this course is offered			
6. Pre-requisites for this course (if any) RHPT 242 & RHPT 243			
7. Co-requisites for this course (if any)			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100 %"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. E-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course? This course introduces the students to the principles, types, techniques, the physiological and Therapeutic effects, the indications, contraindications, dangers and precautions of massage. Moreover, the course provides the student with the required information about the techniques of application of massage, Planning and managing the appropriate way of application of different types of massage. The goal of this course is to enable the student to utilize various types of massage to develop a plan of care, recognizing and addressing the present clinical symptom (Holistic Approach) of various patients presenting with different clinical conditions.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
1. The Lectures should also be a part of updating their knowledge through continuous medical education (CME), periodically in rotational basis. 2. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc). 3. Students will be encouraged to do the following: a. Acquiring knowledge through the Internet, journals and verifying the other information resources. b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

This course introduces the students to the principles, types, techniques, the physiological and Therapeutic effects, the indications, contraindications, dangers and precautions of massage. Moreover, the course provides the student with the required information about the techniques of application of massage, Planning and managing the appropriate way of application of different types of massage.

CONTENTS OF THE COURSE (THEORY)		
Topics	No. of Weeks	Contact hours
<b>Introduction to Medical massage</b> a) Definition of massage b) History of massage c) Purpose of massage d) General principles of massage	Week1	03
<b>Effects of massage</b> a) Physiological effects of massage b) Mechanical effects of massage <b>Contra Indications of massage</b> a) Local contra indication b) General contra indication	Week 2	03

<b>Massage Manipulation</b>  a) Stroking manipulations b) Petrissage manipulations c) Percussion manipulation d) Friction manipulation	Week 3	03
<b>Massage for Upper limb</b>  a) Indications b) Patient preparation c) Sequence of massage d) Directions of massage	Week 4	03
<b>Massage for Lower limb</b>  a) Indications b) Patient preparation c) Sequence of massage d) Directions of massage	Week 5	03
<b>Massage for Back Massage</b>  a) Indications b) Patient preparation c) Sequence of massage d) Directions of massage	Week 6	03
<b>In course examination 1(Mid Term Exam – Theory &amp; Practical)</b>	Week 7	
<b>Massage for Neck Massage</b>  a) Indications b) Patient preparation c) Sequence of massage d) Directions of massage	Week 8	03
<b>Massage for Facial Massage</b>  a) Indications b) Patient preparation c) Sequence of massage d) Directions of massage	Week 9	03



<b>Massage for Abdominal Massage</b> a) Indications b) Patient preparation c) Techniques of Abdominal massage d) Directions of massage	Week 10	03
<b>Sports Massage</b> a) Indications b) Types of Sports Massage c) Techniques of Sports massage d) Directions of massage	Week11	03
<b>Infants Massage</b> a) Indications b) Aims of Infant Massage c) Techniques of Infants of massage d) Directions of massage	Week12	03
<b>In course examination 2(Mid Term Exam – Theory)</b>	Week13	
<b>Mechanical devices used for giving massage</b> a) Hand held devices b) Stationary Massage Devices c) Alternating Pressure Devices d) Intermittent Compression system e) Hydro Massage	Week14	03
<b>Topic Presentation</b>	Week15	03
<b>Final Theory examination</b>	Week16	02

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	15			30		45
Credit	1			1		2
3. Additional private study/learning hours expected for students per week.						NA

#### 4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.





	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A1.1	Recognize the basic knowledge in application of various Medical massage techniques.	Lecture, Lecture - demonstration & class discussion by teacher, Text book assignments, open text book study, homework & practice, summarizing & note taking, daily re-looping of previously learned material	M.C.Q, S.A.Q, Scenario based question and Case study question
A1.2	Recall the physiological & therapeutic effects of massage along with indications and contraindication for various massage techniques.		
<b>B</b>	<b>Cognitive Skills</b>		
B2.1	<b>Justify</b> the basic methods and Techniques of Massage to deal with different kinds of patients & conditions.	Case method, use of motion pictures, educational films, pod cats & video tapes	Scenario based question, Case study question
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
C3.1	<b>Demonstrate</b> basic ethics & bedside manners during Massage session.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Practical exam
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
D4.1	<b>Demonstrate</b> the recent advancement in Massage & update the scope of Massage in various medical specialties.	Recitation, debate, use of technology & instructional resources, faculty website, e-mail.	Assignments, Topic Presentation
<b>E</b>	<b>Psychomotor</b>		
E5.1	<b>Demonstrate</b> safely the different techniques of Massage to various regions	Teacher demonstration, Nonlinguistic representation (Physical models, Kinesthetic representations), Simulation/ Role playing, Hands on, active participation	Practical demonstration / case presentation with the model

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise,

	evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quiz 1	3	5%
2	First Midterm exam – Theory	6	10%
3	First Midterm exam – Practical	6	10%
4	Quiz 2	9	5%
	Second Midterm exam – Theory	13	10%
5	Second Midterm exam – Practical	14	10%
6	Presentation	15	10%
7	Final exam – Practical	15	10%
8	Final exam – Theory	16	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

**Students are requested to consult the respective faculty member during their office hours specified in the semester schedule**

#### E. Learning Resources

##### 1.Required Text(s)

- ❖ Massage for therapists, Margaret Hollis, 3<sup>rd</sup> edition, Willy Blackwell, 2009

##### 2.Essential References

- ❖ Manual of massage and measurements – Edith m. prosser
- ❖ Healing massage Techniques (Holistic, classic and emerging Methods),Frances Tappan, 1<sup>st</sup> Edition
- ❖ Manipulation, Traction and Massage, John V.Basmajian, 3<sup>rd</sup> Edition.

##### 3- Recommended Books and Reference Material (Journals, Reports, etc) (Attach List)

- ❖ Beards massage, Wood pecker
- ❖ Deep Tissue Massage, Revised: A Visual Guide to Techniques ; Art Riggs
- ❖ Basic Clinical Massage Therapy: Integrating Anatomy and Treatment; James H. Clay, 2<sup>nd</sup> Edition.
- ❖ Orthopedic Massage: Theory and Technique ; Whitney W. Lowe LMT, 2<sup>nd</sup> Edition
- ❖ Massage Therapy: Principles and Practice; Susan G. Salvo, 3<sup>rd</sup> Edition .

##### 4-.Electronic Materials, Web Sites etc

##### ***Resources on the Web:***

<p>www.apta.org</p> <p>www.physio-med.com</p> <p>www.medsourseusa.com</p> <p>www.books.google.co.in</p> <p>www.amazon.co.uk/electrotherapy</p> <p>www.en.wikipedia.org/wiki/electrotherapy</p> <p>www.wcpt.org</p>
5- Other learning material such as computer-based programs/CD, professional standards/regulations

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <p>Lecture room suitable for 25 students.</p> <p>Separate Practical lab suitable for 25 students. (With proper insulation of wires, central stabilizing unit, Wooden couches preferably )</p>
<p>2.Computing resources (AV, data show, Smart Board, software, etc.)</p> <p>One computer in the classroom, and another in the lab.</p> <p>Projector. (In both classroom and lab)</p> <p>Smart board. (In both classroom and lab)</p> <p>Data show. (In both classroom and lab)</p>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p><b>A detailed lab accessories required will be attached as a separate list in the first week of the semester.</b></p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <p>a. Asking question before, during and after each lecture</p> <p>b. Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</p>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p> <p>a. Frequent feedback from the students &amp; clarification of doubts now &amp; then</p> <p>Feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff.</p>

3 Processes for Improvement of Teaching
<ul style="list-style-type: none"> <li>a. Attending frequent workshops</li> <li>b. Efficient &amp; effective use of teaching methods</li> <li>c. Easy &amp; illustrative examples</li> </ul>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
<ul style="list-style-type: none"> <li>a. Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</li> <li>b. Matrix – Mapping</li> <li>c. Peer review / department council committee review</li> </ul>
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.
<ul style="list-style-type: none"> <li>a. Continuous evaluation of the students during the term, and frequent updating of the course content.</li> </ul>

**Faculty or Teaching Staff:**

**Mr. Walaa Mohamed. (Male Section) & Mrs. Savita Singh (Female Section)**

**Signature:**

**Male section:**

• **Mr. Walaa Mohamed** \_\_\_\_\_

**Female section**

• **Mrs. Savita Singh** \_\_\_\_\_

**Course coordinator Mr. Walaa Mohamed.**

**Date Report Completed: 05-04-1436**

**Received by: Fuzail Ahmed**

**Department Head**

**Signature:** \_\_\_\_\_

**Date:**



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**Physical Therapy in Pediatrics  
RHPT 364/ PHT 332**

## Course Specifications

Institution: <b>Majmaah University</b>	Date of Report: <b>1435/1436H – 2<sup>nd</sup> Semester (18/1/2015)</b>
College/Department : <b>College of Applied Medical Sciences / Department of Physical Therapy &amp; Health Rehabilitation</b>	

### A. Course Identification and General Information

1. Course title and code: <b>Physical therapy For Pediatrics, RHPT 364 and PHT 332</b>			
2. Credit hours: <b>3</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Physical Therapy &amp; Health Rehabilitation</b>			
4. Name of faculty member responsible for the course Course Coordinator : <b>Ms.Nivedita.P.Kashyap</b>  Course Instructors    1. <b>Ms.Minaz.Shaikh</b> (Section:402,403) 2. <b>Ms.Nivedita.P.Kashyap</b> (Section:163,164) 3. <b>Mr.AbdelHameed Degidhi</b> (Section:900,901,885,886,887)			
5. Level/year at which this course is offered: <b>Level 6, 3<sup>rd</sup> year</b>			
6. Pre-requisites for this course (if any): <b>RHPT 351,RHPT 354/PHT 315</b>			
7. Co-requisites for this course (if any)			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			



## B Objectives

1. What is the main purpose for this course? This course provides the student with the required information about the techniques of application to treat various pediatric conditions. Planning and managing the appropriate way of application of treatment for various pediatric disorders. This course also serves to integrate the knowledge gained by the students in clinical pediatric conditions with the skills gained in exercise therapy, electrotherapy and thus enabling them to apply these in clinical situations. The student gains knowledge to evaluate pediatric conditions, to acquire knowledge of normal growth and development, different treatment measures for neuropsychiatric problems, orthopedic problems in children and genetic disorders.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
<ol style="list-style-type: none"> <li>The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)</li> <li>Students will be encouraged to do the following: <ol style="list-style-type: none"> <li>Acquiring knowledge through the Internet, journals and verifying the other information resources.</li> <li>Sharing the acquired knowledge with critical/lateral thinking &amp; clinical reasoning.</li> </ol> </li> </ol> <p>Conduct field visits to other department in hospitals</p>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
<b>Motor development in normal child</b> Variability of human growth and development Developmental theories Principles of Developmental Direction Differences between Full term and Preterm Gross motor development Fine motor Development	Week 1	4 hours

<b>Assessment of the infant and child development</b> Purposes of developmental testing Guidelines for selection of tests Overview of tests; Screening tests, tests for motor function Comprehensive Developmental Scales	Week 2	3 hours
<b>Assessment Demonstration (Practical )</b>		1 hour
<b>Providing family-centered care in pediatric physical therapy</b> Barriers to family centered care Family response to illness and disabilities Culture (diversity versus sensitivity) Providing family-centered intervention Benefits of Providing family-centered care	Week 3	4 hours
<b>Cerebral palsy</b> Definition, Incidence, Etiology , classification and associated problems Physical Therapy examination and Evaluation Physical Therapy intervention :Neurodevelopmental technique(bobath), Sensory integration, electrical stimulation, conductive education Orthopaedic surgery for child with CP	Week 4&5	6 hours
<b>Demonstration of Physical Therapy Treatment (Practical)</b>		2hours
<b>Incourse examination 1(Mid Term Exam – Theory &amp;Practical)</b>	Week 6	4 hour
<b>Spina bifida:</b> Definitions , Incidence , etiology and Prognosis of spina bifida Physical therapy for infant with spina bifida: Muscle testing, ROM, positioning and sensory assessment Physical Therapy examination and Evaluation  Physical Therapy intervention <b>Hydrocephalus:</b> assessment and management	Week 7&8	3hours
<b>Assessment &amp;Treatment for Spina bifida (Practical)</b>		1 hour
<b>Neuromuscular disorders in childhood</b> Duchenne Muscular dystrophy Myotonic dystrophy,limb girdle muscular dystrophy Physical Therapy examination and Evaluation  Physical Therapy intervention	Week 9	3 hours

<b>Assessment and treatment of Muscular Dystrophy (Practical)</b>		1 hour
<b>Down Syndrome</b> Definition, Incidence, Diagnosis, Classification. Physical Therapy examination and Evaluation Physical Therapy intervention	Week10	4 hours
<b>Orthopedic conditions</b> Congenital limb deficiency, Prenatal deformations, Postnatal deformations, dysplasia, Pathologic conditions Physical Therapy examination and Evaluation Physical Therapy intervention	Week 11	4 hours
<b>Brachial Plexus Injuries</b> Incidence, Pathogenesis, causes Common types of nerve injuries- Neuropraxia, Neurotomesis, Axonotomesis, Types of Brachial plexus Injuries- Erbs Palsy, Klumpkes Palsy, Complete palsy., Physical Therapy management of brachial plexus	Week 12	4 hours
<b>In course examination 2(Mid Term Exam – Theory &amp; Practical)</b>	Week 13	2 hours
<b>Pulmonary disorders in Infants and children</b> Growth and development of the lungs Predisposition to respiratory failure Physical Therapy examination and Evaluation PT interventions for children with Pulmonary diseases	Week 13	2hours
<b>Assessment and treatment of Pulmonary disorders in children (Practical)</b>	Week 14	2 hour
<b>Pediatric oncology</b> Common types of Pediatric cancer Physical Therapy examination and Evaluation Physical Therapy intervention	Week 14	2 hours
<b>Revision</b>	Week 15	4 hours
<b>Final practical examination</b>	Week 16	4 hours

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	60			15		75
Credit	2			1		3

3. Additional private study/learning hours expected for students per week.	5 hrs
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
A	Knowledge		
a.3.1	The students will be able to <b>recognize</b> motor development in normal child and potential factors influencing the acquisition of basic and functional motor abilities and describe the common disorders in pediatric	Lecture, Lecture - demonstration & class discussion by teacher, Text book assignments, open text book study, homework & practice, summarizing & note taking, daily re-looping of previously learned material	Short essay questions, multiple choice questions, Log Book & Rubrics
a.3.2	The Students will be able to <b>describe/define</b> selected pediatric conditions including but not limited to: CP, torticollis, Hydrocephalus, Brachial plexuses injuries, Down syndrome, Spina bifida and common orthopedic conditions.		
B	Cognitive Skills		
b.3.1	<b>Analyze</b> basic principles of evaluation for planning appropriate treatment program according to client/patient's need for intervention	Lecture, Presentation & small group discussion& assignments	Case study question& Rubrics
b.3.2	Design & reconstruct the rehabilitation process for each Pediatric patient and to Measure the effectiveness of the treatment		
C	Interpersonal Skills & Responsibility		
c.2.1	<b>Implement</b> the knowledge of different Regions, and Support Systems to create the effective clinical reasoning in Management of pediatric disorders.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Clinical case presentation and Demonstrations
c.2.2	<b>Display</b> moral responsibility and sound critical Judgment in typical and atypical motor development	Explanation Demonstration Practice	Class presentation  Practical demonstration
D	Communication, Information Technology, Numerical		
d.2.1	Effective use of computers, multimedia and other information systems for presentation of information and documentation	Motivation  Information about the relevant IT services	Giving assignments & checking it for its content

<b>E</b>	<b>Psychomotor</b>		
e.1.1	Perform specific techniques used as treatment Strategies for different developmental disorders.	Teacher demonstration, Simulation/ Role playing, Hands on, active participation, lab demonstrations	Practical demonstration / case presentation with the model

**Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching**

<b>NQF Learning Domains</b>	<b>Suggested Verbs</b>
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quiz 1	3	5%
2	First Midterm exam – Theory	6	15%
3	Midterm exam – Practical	7	10%
4	Second Midterm exam – Theory	13	15%
5	Presentations/Log book	14	10%
6	Assignments	14	5%
7	Final exam – Practical	15	10%
8	Final exam – Theory	16	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

The students can come and meet the staffs during their respective office hours.

#### E. Learning Resources

1. List Required Textbooks

Pediatric Physical Therapy by Jans Tecklin, Fourth Edition

Physiotherapy in Pediatrics by Sophie lewitt

2. List Essential References Materials (Journals, Reports, etc.)

Pediatric Physical Therapy by Jans Tecklin, Fourth Edition

Physiotherapy in Pediatrics by Sophie lewitt

Physical Therapy for Children by Suzann k. Campbell and Robert .J.Palisano

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

Pediatric Physical Therapy by Jans Tecklin, Fourth Edition

Physiotherapy in Pediatrics by Sophie lewitt

Physical Therapy for Children by Suzann k. Campbell and Robert .J.Palisano

**Scrutton D (1984):** Management of Motor Disorders of Children with Cerebral Palsy.  
Oxford, Blackwell Scientific Publications

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

[www.apta.org](http://www.apta.org)

[www.physio-med.com](http://www.physio-med.com)

[www.medsourceusa.com](http://www.medsourceusa.com)

[www.books.google.co.in](http://www.books.google.co.in)

[www.amazon.co.uk/](http://www.amazon.co.uk/)

[www.en.wikipedia.org/wiki](http://www.en.wikipedia.org/wiki)

[www.wcpt.org](http://www.wcpt.org)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)



<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Lecture room suitable for 25 students. Separate Practical lab suitable for students</p>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.) One computer in the classroom, and another in the lab. Projector. (In both classroom and lab) Smart board. (In both classroom and lab) Data show. (In both classroom and lab)</p>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <p>Asking question before, during and after each lecture b. Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</p>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p> <p>a. Frequent feedback from the students &amp; clarification of doubts now &amp; then Feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff</p>
<p>3 Processes for Improvement of Teaching</p> <p>a. Attending frequent workshops Efficient &amp; effective use of teaching methods Easy &amp; illustrative examples</p>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <p>a. Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field. b. Matrix – Mapping Peer review / department council committee review</p>



5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

Continuous evaluation of the students during the term, and frequent updating of the course content

**Faculty or Teaching Staff:** Mr.Abdel Hamid Deghidi (Male Section)  
Ms.Nivedita.P.Kashyap (Female Section)  
Ms.Minaz.shaikh(Female Section)

**Signature:** \_\_\_\_\_

**Date Report Completed:** \_\_\_\_\_

**Course Coordinator:** Ms.Nivedita.P. Kashyap

**Signature:** \_\_\_\_\_

**Received by:** Dr. Fuzail Ahmad

**Department Head**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications**

**PHARMACOLOGY**

**RHPT 365**

## Course Specifications

Institution MAJMAAH UNIVERSITY	Date of Report:
College/Department: COLLEGE OF APPLIED MEDICAL SCIENCES, PHYSICAL THERAPY & HEALTH REHABILITATION	

### A. Course Identification and General Information

1. Course title and code: <b>Pharmacology, RHPT 365 &amp; PHT 319</b>		
2. Credit hours: 2		
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Bachelor of Physical Therapy and Health Rehabilitation		
4. Name of faculty member responsible for the course		
Course Coordinator : Dr. Fuzail Ahmed		(Section: 902)
Course Instructors 1. Hariraja Muthusamy		(Section: 1608)
2. Mrs. Minaz shaik		(Section: 165, 406)
5. Level/year at which this course is offered: Level 6 / 3 <sup>rd</sup> year		
6. Pre-requisites for this course (if any):		
7. Co-requisites for this course (if any)		
8. Location if not on main campus		
9. Mode of Instruction (mark all that apply)		
a. Traditional classroom	<input checked="" type="checkbox"/> What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="checkbox"/> What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/> What percentage?	<input type="text"/>
d. Correspondence	<input type="checkbox"/> What percentage?	<input type="text"/>
f. Other	<input type="checkbox"/> What percentage?	<input type="text"/>
Comments:		

## B Objectives

1. What is the main purpose of this course? The course includes the basic general pharmacological principles. The clinical uses and physiological effect of drug in body systems; the common drugs, its effects, side-effects and dose used for the patients that can be indicated in treatment of cardiovascular, respiratory and nervous systems.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. Increased use of IT or web based reference material, changes in content as a result of new research in the field)

## C. Course Description (Note: General description in the form to be used in the Bulletin or handbook should be attached)

This course contains detailed information on pharmacokinetics, pharmacodynamics, pharmacotherapeutics, key types of adverse reactions drugs encountered by a physiotherapist in a normal hospital setting.

5. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
1. Fundamentals of pharmacology A. Pharmacology basics B. The routes by which drugs are administered C. Key concepts of pharmacokinetics D. Key concepts of pharmacodynamics E. Key concepts of pharmacotherapeutics F. Key types of adverse reactions.	2	4
2. Autonomic nervous system drugs A. Classes of drugs that affect the autonomic nervous system B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. Adverse effects of these drugs.	2	4
3. Neurologic and neuromuscular drugs A. Classes of drugs used to treat neurological and neuromuscular disorders B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. Adverse effects of these drugs.	1	2

4. Pain medications A. Classes of drugs used to control pain B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. Adverse reactions to these drugs.	2	4
5. Cardiovascular drugs A. Classes of drugs used to treat cardiovascular disorders B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. adverse reactions to these drugs.	1	2
6. Hematologic drugs A. Classes of drugs used to treat hematologic disorders B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. Adverse reactions to these drugs.	1	2
7. Respiratory drugs A. Classes of drugs used to treat respiratory disorders B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. adverse reactions to these drugs.	1	2
8. Gastrointestinal drugs A. Classes of drugs used to improve GI function B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. Adverse reactions to these drugs.	1	2
9. Anti-inflammatory, anti-allergy, and immunosuppressant drugs A. Classes of drugs that modify immune or inflammatory responses B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. Adverse reactions to these drugs.	1	2

10. Musculoskeletal Drugs A. Skeletal muscle relaxants and Antirheumatic drugs and drug used in gout B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. Adverse reactions to these drugs.	2	4
11. Urinary system Drugs A. Classes of drugs used to improve Urinary system function B. Uses and varying actions of these drugs C. How these drugs are absorbed, distributed, metabolized, and excreted D. Adverse reactions to these drugs.	1	2

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30	--	--	-	--	30
Credit	2	--	--	-	--	2

3. Additional private study/learning hours expected for students per week.	2
--	---

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align



with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A1	Define the basic terms and concepts of pharmacology.	Lecture, debate, small group work, projects, debates, memorization, humor.	Long essay and short essay, Written, Assignments
A2	Outline the use and action of drugs used in in pain, cardiovascular disorders, and hematological problems, inflammatory, respiratory and gastrointestinal disorders.	Lecture, debate, small group work, projects, debates, memorization, humor.	Long essay and short essay, Written, Assignments
A3	List of drugs used in pain, cardiovascular disorders, hematological problems, inflammatory, respiratory and gastrointestinal disorders.	Lecture, debate, small group work, projects, debates, memorization, humor.	Long essay and short essay, Written, Assignments
<b>B</b>	<b>Cognitive skills</b>		
B1	Explain the action of drugs used in pain, cardiovascular disorders, and hematological problems, inflammatory, respiratory and gastrointestinal disorders. Inflammatory, respiratory and gastrointestinal disorders.	Lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming.	Exams, portfolios, long and short essays, individual and group presentations, posters, videos
B2	Explain the action of drugs used in pain, cardiovascular disorders, and hematological problems, inflammatory, respiratory and gastrointestinal disorders. Inflammatory, respiratory and gastrointestinal disorders.	Lecture, Debate, video analysis , debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies.	Individual and group presentations, posters, journals, case studies,
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		





<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
<b>E</b>	<b>Psychomotor</b>		

### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

#### **Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1.	Theory exam – First internals	6 <sup>th</sup>	20
2.	Theory exam – Second internals	9 <sup>th</sup>	20
3.	First and Second Quiz	7 <sup>th</sup>	10
4.	Two Assignments	3 <sup>th</sup> and 7 <sup>th</sup>	10
5.	Final Theory examination	16 <sup>th</sup>	40

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Available in office hours depicted outside my office (10 hours per week)

#### E. Learning Resources

1. List Required Textbooks
2. List Essential References Materials (Journals, Reports, etc.)
➤ Lippincott's Illustrated Reviews: Pharmacology, Harvey R. A., Champe P. C., Finkel R., Cubeddu L., & Clarke M. A
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
➤ Clinical Pharmacology Made Incredibly Easy! 3rd Edition © 2009 Lippincott Williams & Wilkins.
➤ Goodman and Gilman's: The Pharmacological Basis of Therapeutics, L. S., Limbird, L. E., Milinoff, P. B., Ruddon, R. W., & Gilman, A. G.

<ul style="list-style-type: none"> <li>➤ Board Review Series Pharmacology (Flash Cards), Kim, Sandra I., and Todd A. Swanson</li> <li>➤ Ciccone CD: Pharmacology in Rehabilitation, Ciccone</li> </ul>
<p>4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)</p> <p><a href="http://www.apta.org">www.apta.org</a>  <a href="http://www.physio-med.com">www.physio-med.com</a>  <a href="http://www.medsourceusa.com">www.medsourceusa.com</a>  <a href="http://www.books.google.co.in">www.books.google.co.in</a>  <a href="http://www.amazon.co.uk/">www.amazon.co.uk/</a>  <a href="http://www.en.wikipedia.org/wiki">www.en.wikipedia.org/wiki</a>  <a href="http://www.wcpt.org">www.wcpt.org</a></p>
<p>5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p>

## F. Facilities Required

<p>Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.) 20</p>
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> <li>➤ One computer in the classroom, and another in the lab.</li> <li>➤ Projector. (In both classroom and lab)</li> <li>➤ Smart board. (In both classroom and lab)</li> <li>➤ Data show. (In both classroom and lab)</li> <li>➤ Models</li> </ul>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> <li>➤ One computer in the classroom, and another in the lab.</li> <li>➤ Projector. (In both classroom and lab)</li> <li>➤ Smart board. (In both classroom and lab)</li> <li>➤ Data show. (In both classroom and lab)</li> <li>➤ Models</li> </ul>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching: Questionnaire</p> <ul style="list-style-type: none"> <li>➤ Asking question before, during and after each lecture</li> <li>➤ Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</li> </ul>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p>

<ul style="list-style-type: none"> <li>➤ Frequent feedback from the students &amp; clarification of doubts now &amp; then</li> <li>➤ Feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff</li> </ul>
<p>3 Processes for Improvement of Teaching: PBL</p> <ul style="list-style-type: none"> <li>➤ Attending frequent workshops</li> <li>➤ Efficient &amp; effective use of teaching methods</li> <li>➤ Easy &amp; illustrative examples</li> </ul>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"> <li>➤ Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</li> <li>➤ Matrix – Mapping</li> <li>➤ Peer review / department council committee review</li> </ul>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none"> <li>➤ Continuous evaluation of the students during the term, and frequent updating of the course content</li> </ul>

**Faculty or Teaching Staff: Mr. Faizan Zaffar Kashoo, Mr.Hariraja Muthusamy**

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Course Coordinator: Dr.Fuzial Ahmed** **Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad** **Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**Traumatology – RHPT 366**

**Second Semester 1435–1436H**

## Course Specifications

Institution	<b>Majmaah University</b>	Date of Report <b>5/4/1436</b>
College/Department : College of Applied Medical Sciences / Department of Physical Therapy & Health Rehabilitation		

### A. Course Identification and General Information

1. Course title and code: <b>Traumatology - (RHPT 366)</b>		
2. Credit hours <b>2 hours credits/week</b> <b>Lecture:1h</b> <b>Practical:1h</b>		
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Department of Physical Therapy &amp; Health Rehabilitation</b>		
4. Name of faculty member responsible for the course <b>Dr. Mohamed Atif (Boys Section-903)</b> <b>Dr. Walaa Sayed Mohammad, (Girls Section)</b>		
5. Level/year at which this course is offered : <b>6th level/ 3rd year</b>		
6. Pre-requisites for this course (if any) <b>Introduction to biomechanics (RHPT 245)</b>		
7. Co-requisites for this course (if any)		
8. Location if not on main campus <b>None</b>		
9. Mode of Instruction (mark all that apply)		
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage? <input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage? <input type="text"/>
c. e-learning	<input type="text" value="NA"/>	What percentage? <input type="text"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage? <input type="text"/>
f. Other	<input type="text" value="NA"/>	What percentage? <input type="text"/>
Comments:		

## B Objectives

1. What is the main purpose for this course? <u>Upon the completion of this course, students should able to</u> Build up knowledge of traumatology as well as the diseases of the musculoskeletal system and joint injuries, identify the Type of Fractures and Dislocations caused with respect to the Mechanism of Injury, and demonstrate an understanding of Orthopedic conditions causing disability and their Management.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field) <ul style="list-style-type: none"> <li>1. Updating course material.</li> <li>2. Updating references used.</li> <li>3. Updating assessment and changes questions.</li> </ul>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached).

The course is designed to give an understanding of traumatology as well as the diseases of the muscular skeletal system and joint injuries. The course also covers the types of fractures and dislocation, and the treatment methods.

1. Topics to be Covered		
Topics to be Covered	No of Weeks	Contact hours
<b>FRACTURES &amp; DISLOCATIONS</b> <b>- General Principles Outline the following:</b> <ol style="list-style-type: none"> <li>1. Define fracture; Review the types, the signs, and symptoms.</li> <li>2. Types of Fractures including patterns, open and closed fractures</li> <li>3. Difference between dislocation &amp; subluxation.</li> <li>4. General &amp; Local signs &amp; symptoms of fractures &amp; dislocations</li> </ol> <b>- Complications of Fractures</b> <b>- First - aid measures</b>	1 <sup>st</sup> & 2 <sup>nd</sup> Weeks	6
<b>- Stages of fracture healing</b> <b>- Tests of union</b> <b>- Methods of Physical Therapy Assessment</b> of a patient with a musculoskeletal injuries.	3 <sup>rd</sup> & 4 <sup>th</sup> Weeks	6
<b>- Principles of management of fractures</b> <ul style="list-style-type: none"> <li>- Reduction</li> <li>- Immobilization</li> <li>- Rehabilitation</li> </ul> <b>- Radiograph- Xray:</b> Identification of Upper Limb Fractures	5 <sup>th</sup> & 6 <sup>th</sup> Week	6

<b>-In-Course Exam I (Theoretical midterm )</b>	7 <sup>th</sup> Week	
<ul style="list-style-type: none"> <li>- <b>The mechanism of injury. Clinical features, treatment and complications</b></li> <li>A. Fracture clavicle</li> <li>B. Fracture of Humerus</li> <li>C. Colle's fracture</li> <li>D. Smith fracture</li> <li>E. Scaphoid fracture.</li> </ul>	8 <sup>th</sup> & 9 <sup>th</sup> Weeks	6
<ul style="list-style-type: none"> <li>- Neck of Femur Fracture</li> <li>- Shaft of Femur Fracture</li> <li>- Proximal Tibia Fracture</li> <li>- Both bones Fracture of leg                             <ul style="list-style-type: none"> <li>o Management and Complications following Potts Fracture</li> <li>o <b>Radiograph- Xray:</b> Identification of Lower Limb Fractures</li> <li>o Physical therapy Management</li> <li>o Gait Training For Lower Limb Fractures: Non weight bearing, Partial weight bearing, Full Weight Bearing</li> </ul> </li> </ul>	10 <sup>th</sup> & 11 <sup>th</sup> Weeks	6
<ul style="list-style-type: none"> <li>- <b>Dislocation of shoulder joint</b></li> <li>- <b>Outline the mechanism, clinical features management dislocation of the shoulder.</b></li> </ul>	12 <sup>th</sup> week	3
<b>-In-Course Exam II (Theoretical midterm )</b>	13 <sup>th</sup> week	
<ul style="list-style-type: none"> <li>- <b>Anterior Cruciate ligament injury</b></li> <li>- <b>Meniscal injury</b> <ul style="list-style-type: none"> <li>o Special Tests for knee to assess Ligament and Meniscal Injuries.</li> <li>o Etiology &amp; clinical features and treatment.</li> </ul> </li> </ul>	14 <sup>th</sup> week	3
<ul style="list-style-type: none"> <li>- <b>Fracture vertebral column.</b></li> <li>- <b>Whiplash injury.</b></li> </ul>	15 <sup>th</sup> Week	3
<b>-Final Exam</b>	16 <sup>th</sup> week	



2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	15		30			45
Credit	1		1			2

3. Additional private study/learning hours expected for students per week.	2
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>a.0</b>	<b>Knowledge</b>		
a3	a3.1 To describe the Mechanism of Injury and associated complications following Trauma.	1. Lecture using a. Power point presentation b. Smart board. c. Illustrative schematic diagrams	1. Written exam. 2. Quiz 3. Assignment
a3	a3.2 Define the principles used in management of musculoskeletal Injuries.	2. Small group discussion.	
<b>b.0</b>	<b>Cognitive Skills</b>		
b3	b3.1 To explain the mechanism of injury, clinical features treatment of the musculoskeletal injuries.	1. Lecture using a. Power point presentation b. Smart board. c. Illustrative schematic diagrams	1. Written exam 2. Quiz
b3	b3.2 To differentiate between different types of fractures and soft tissue injuries..	2. Small group discussion	
<b>c.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
c2	c2.1 To display moral responsibility & work independently and as in groups including leadership responsibilities.	1. Lecture 2. Class room presentation	1. Practical exam 2. Assignment & presentation
<b>d.0</b>	<b>Communication, Information Technology, Numerical</b>		
d2	d2.1 To display the ability to use the latest technology to collect information about the musculoskeletal injuries and their management	1. Lecture using a. Power point presentation b. Smart board. c. Illustrative schematic diagrams	1. Practical exam 2. Assignment & presentation.
		2. Small group discussion	
<b>e.0</b>	<b>Psychomotor</b>		
e1	e1.1 To perform first aid management to patients following Trauma & To demonstrate special tests of soft tissue injuries and their physical therapy management and reassess for prognosis.	1. Lecture demonstration. 2. Simulation 3. Hands on 4. Small group discussion.	1. Practical exam.

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop,

<b>Cognitive Skills</b>	create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quizzes	4 <sup>th</sup> & 10 <sup>th</sup> week	10%
2	Assignment & Presentation	13 <sup>th</sup> week	10%
3	Theoretical mid term	7 <sup>th</sup> , 13 <sup>th</sup> week	20%
4	Practical mid term	6 <sup>th</sup> week	20%
5	Final practical exam	15 <sup>th</sup> week	20%



6	Final Theoretical exam	16 <sup>th</sup> week	20%
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#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

2 hours per week

#### E. Learning Resources

1. List Required Textbooks

- Dandy DJ, Edwards DJ. (2009) "Essential Orthopaedics and Trauma: With STUDENT CONSULT Online Access" 5<sup>th</sup> ed., Elsevier, China.
- Atkinson K, Coutts FJ, Hassenkamp A. (2005) "Physiotherapy in Orthopaedic A Problem-solving Approach" 2<sup>nd</sup> ed., Churchill Livingstone, Toronto.

2. List Essential References Materials (Journals, Reports, etc.)

- Hamblen DL, Simpson H (2007) "Adams's Outline of Fractures: Including Joint Injuries" 12<sup>th</sup> ed., Churchill Livingstone.

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- Solomon L, Watrick DJ, Nayagam S. (2005) "Apley's Concise System of Orthopaedics and Fractures" 3<sup>rd</sup> ed., Hodder Arnold Publication.
- Magee DJ. (1997) "Orthopedic Physical Assessment". WB Saunders Company.

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

Some medical webs such as

www.apta.org  
www.physio-med.com  
www.medsourceusa.com  
www.books.google.co.in  
www.wcpt.org

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

**Using power point program**

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- a. Lecture room (30 seats)
- b. Practical lab (15 seats)

2. Computing resources (AV, data show, Smart Board, software, etc.)

- a. Data show device
- b. Smart Board

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach



list)

- Each member need laptop
- Classroom and Practical lab require wireless network.

### G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> <li>a. Written questionnaire at the end of the semester.</li> <li>b. Web based online student questionnaire at the end of semester.</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
<ul style="list-style-type: none"> <li>a. Faculty Peer review</li> <li>b. Student feedback.</li> </ul>
3 Processes for Improvement of Teaching
<ul style="list-style-type: none"> <li>a. Course report analysis, feedback from all the stakeholders (Peer, Students, teachers, quality unit etc).</li> <li>b. Implementation and regulation of unified course outcomes and class objectives in both male &amp; female sections.</li> <li>c. Unified assessment methods especially for practical's based on rubrics.</li> <li>d. Involvement of faculty members in various professional activities by attending frequent workshops/CME etc. for continuous up gradation of knowledge &amp; skills.</li> </ul>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
<ul style="list-style-type: none"> <li>• Peer review by faculty member of another department.</li> </ul>
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.
<ul style="list-style-type: none"> <li>a. Students feedback analysis</li> <li>b. Course report analysis</li> <li>c. Program report</li> </ul> <p>Based on these reports the department makes the strategic action plan for each semester.</p>

**Faculty or Teaching Staff: Dr. Walaa S. Mohammad**

**Signature:** \_\_\_\_\_

**Date Report Completed: 5/4/1436**

**Course Coordinator: Dr. Mahamed Ateef**

**Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmed**

**Department Head**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**ORTHOTICS & PROSTHETICS**

**RHPT 471**

**2<sup>nd</sup> Semester 1435-1436**

## Course Specifications

Institution	<b>MAJMAAH UNIVERSITY</b>	Date of Report: <b>25<sup>TH</sup> JANUARY 2015</b>
College/Department:	<b>COLLEGE OF APPLIED MEDICAL SCIENCES</b>	

### A. Course Identification and General Information

1. Course title and code: <b>ORTHOTICS &amp; PROSTHETICS</b>			
2. Credit hours: <b>2 (1+1+0)</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>PHYSICAL THERAPY PROGRAM</b>			
4. Name of faculty member responsible for the course Course Coordinator : <b>PRASHANT P. KASHYAP</b> (Section:905 / 906) Course Instructors			
5. Level/year at which this course is offered: <b>7<sup>th</sup> level, 4<sup>th</sup> year</b>			
6. Pre-requisites for this course (if any): <b>RHPT 241, RHPT 242, RHPT 243</b>			
7. Co-requisites for this course (if any): <b>NA</b>			
8. Location if not on main campus: <b>NA</b>			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course?
<ol style="list-style-type: none"> <li>1. Evaluate patients' needs to use orthotic and/or prosthetic devices.</li> <li>2. Develop knowledge about designing and fabrication of different orthotic and prosthetic devices.</li> <li>3. Analyze the biomechanical bases of orthotics and prosthetics design and function.</li> <li>4. Synthesize a simple orthotic or prosthetic device.</li> </ol>
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
<ol style="list-style-type: none"> <li>1. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)</li> <li>2. Students will be encouraged to do the following: <ol style="list-style-type: none"> <li>a. Acquiring knowledge through the Internet, journals and verifying the other information resources.</li> <li>b. Sharing the acquired knowledge with critical/lateral thinking &amp; clinical reasoning.</li> <li>c. Conduct field visits to orthotics and prosthetics department in hospitals.</li> </ol> </li> </ol>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

### 1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours
<ul style="list-style-type: none"> <li>❖ Introduction to prosthesis and orthosis.</li> <li>❖ Rehabilitation of an amputee.</li> </ul>	Week1	03
<ul style="list-style-type: none"> <li>❖ Problem of the stump.</li> <li>❖ Immediate postoperative prosthesis fitting (IPPF)</li> </ul>	Week 2	03
<ul style="list-style-type: none"> <li>❖ Prosthesis in foot and ankle amputation.</li> </ul>	Week 3	03
<ul style="list-style-type: none"> <li>❖ Prosthesis in transtibial amputation.</li> <li>❖ Gait deviations transtibial amputation.</li> <li>❖ Prosthesis in knee disarticulation.</li> </ul>	Week 4-5	06
<ul style="list-style-type: none"> <li>❖ Prosthesis in transfemoral amputation.</li> <li>❖ Gait deviations transfemoral amputation.</li> <li>❖ Prosthesis in Hip disarticulation.</li> </ul>	Week 5-6	06
<b>In course examination 1(Mid Term Exam – Theory &amp;Clinical)</b>	Week 7	
<ul style="list-style-type: none"> <li>❖ Prosthesis in upper limb amputation</li> </ul>	Week 8	04
<ul style="list-style-type: none"> <li>❖ Introduction to orthosis.</li> </ul>		





❖ Function of orthosis. ❖ Prescription of orthosis.	Week 9	04
❖ Spinal orthosis. ➢ Cervical Orthosis ➢ Thoracolumbosacral orthosis. ➢ Orthosis to correct spinal deformities.	Week 10	04
❖ Upper limb orthosis. ❖ Lower limb weight relieving orthosis.	Week 11	04
❖ Lower limb orthosis ❖ Foot wear modifications	Week 12	04
<b>In course examination 2(Mid Term Exam – Theory &amp; Clinical)</b>	Week 13	
❖ Ambulatory aids	Week 13-14	04
<b>Final Practical exam</b>	Week 15	04
<b>Final Examination</b>	Week 16	

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	15			30		45
Credit	1			1		2

3. Additional private study/learning hours expected for students per week.

5 hrs

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.



**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
<b>a2.1</b>	a2.1. Understand the pathomechanics of Musculoskeletal conditions and their effects on normal functional capacity, and principles of the orthotics and prosthetic treatments.	Lecture, Lecture - demonstration & class discussion by teacher, Text book assignments, open text book study, homework & practice, summarizing & note taking, daily re-looping of previously learned material	M.C.Q & S.A.Q
<b>2.0</b>	<b>Cognitive Skills</b>		
<b>b2.1</b>	b2.1. Understand the importance and goals of chosen orthosis / prostheses as a part of rehabilitation process	Case method, use of motion pictures, educational films, pod cats & video tapes	Scenario based question, Case study question
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
<b>c1.1</b>	c1.1-The student will able to <b>demonstrate</b> collecting, organizing information and ideas and to convey those ideas clearly and fluently by writing & effectively interacting with their colleagues in an ethical manner.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Clinical case presentation and worksheets
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
<b>d1.1</b>	d1.1. The student will able to <b>appraise</b> an evidence-based approach, research & references to acquire new knowledge to continuously improve own practice related to orthotics and prosthetics		

<b>5.0</b>	<b>Psychomotor</b>		
<b>e1.1</b>	<b>Illustrate</b> orthotic and prosthetic training and rehabilitation techniques to the patients.	Teacher demonstration, Nonlinguistic representation (Physical models, Simulation/ Role playing, Hands on, active participation	Practical demonstration / case presentation with the model

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble,

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

#### Suggested assessment methods and teaching strategies are:

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam – Theory	7	20%
2	1 <sup>st</sup> Midterm practical	9	10%
3	Second Midterm exam – Theory	12	20%
4	2 <sup>nd</sup> Midterm practical	13	10%
5	Final exam clinical – Clinical Case presentation	14	10%
6	Final exam – Theory	15	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)			
Day		Mr. Prashant	
Sunday			
Monday		8:00 am – 10:00 am	
Tuesday		8:00 am – 10:00 am	
Wednesday			
Thursday		8:00 am – 10:00 am	

#### E. Learning Resources

1. List Required Textbooks
<input type="checkbox"/> <b>Short textbook of prosthesis and orthotics- R Chinnathurai</b>
<input type="checkbox"/> <b>Text book of Rehabilitation- S Sunder,3rd edition,Jaypee brothers</b>
2. List Essential References Materials (Journals, Reports, etc.)
<ul style="list-style-type: none"> <li>• <b>Short textbook of prosthesis and orthotics- R Chinnathurai</b></li> <li>• <b>Text book of Rehabilitation- S Sunder,3rd edition,Jaypee brothers</b></li> </ul>
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
•
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)
<ul style="list-style-type: none"> <li>• <a href="http://www.apta.org">www.apta.org</a></li> <li>• <a href="http://www.physio-med.com">www.physio-med.com</a></li> </ul>

- [www.medsourceusa.com](http://www.medsourceusa.com)
- [www.books.google.co.in](http://www.books.google.co.in)
- [www.amazon.co.uk](http://www.amazon.co.uk)
- [www.en.wikipedia.org/wiki](http://www.en.wikipedia.org/wiki)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- **Lecture room suitable for 25 students.**
- **Separate Practical lab suitable for students.**

2. Computing resources (AV, data show, Smart Board, software, etc.)

- **One computer in the classroom, and another in the lab.**
- **Projector. (In both classroom and lab)**
- **Smart board. (In both classroom and lab)**
- **Data show. (In both classroom and lab)**

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- **Asking question before, during and after each lecture**
- **Provision of appraisal form to the students & to rectify changes if any – done through HOD consent**

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

- **Frequent feedback from the students & clarification of doubts now & then**
- **Feedback from the students oral or written about the lecture by the supervisor or HOD of the department & later to discuss the issues if any with the concerned staff.**

3 Processes for Improvement of Teaching

- **Attending frequent workshops**
- **Efficient & effective use of teaching methods**
- **Easy & illustrative examples**

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample



of assignments with staff at another institution)

- **Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.**
- **Matrix – Mapping**
- **Peer review / department council committee review**

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

**Continuous evaluation of students during the term, and frequent updating of the course content.**

**Faculty or Teaching Staff: Mr. Prashant P. Kashyap**

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Course Coordinator: Mr. Prashant P. Kashyap** **Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad** **Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications**  
**Physical Therapy for Neurological Disorders**  
**RHPT 472**

## Course Specifications

Institution MAJMAAH UNIVERSITY	Date of Report:
College/Department: COLLEGE OF APPLIED MEDICAL SCIENCES, PHYSICAL THERAPY & HEALTH REHABILITATION	

### A. Course Identification and General Information

1. Course title and code: <b>Physical therapy in neurological disorders, RHPT-472</b>			
2. Credit hours: 3			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Bachelor of Physical Therapy and Health Rehabilitation			
4. Name of faculty member responsible for the course: <b>Dr. Mohamed Sherif Sirajudeen</b>			
5. Level/year at which this course is offered: Level 7			
6. Pre-requisites for this course (if any): <b>RHPT 351, RHPT 354</b>			
7. Co-requisites for this course (if any)			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. Correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. Other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



## B Objectives

1. What is the main purpose for this course?
<ul style="list-style-type: none"> <li>a. Understanding the pathological processes, the symptomatology, medical and physiotherapy management and outcomes that may present with vascular and traumatic lesions, viral and degenerative processes affecting the central nervous system.</li> <li>b. Using a patient/client-centred approach to the assessment and delivery of functional goal-oriented programs that are developed with each patient/client.</li> <li>c. Applying a clinical reasoning process to identify functional limitations and underlying impairments to plan and deliver task/goal oriented rehabilitation programs with measurable outcomes.</li> <li>d. Applying current treatment principles and evidence base to guide the management of patients/clients with neurological disorders</li> </ul>
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

This course contains detailed information on neurological diseases common among adults, including the various causes of those diseases, symptoms, development and clinical picture. It also focuses on the acquisition and development of multiple methods of evaluation of various neurological diseases, and to prepare appropriate treatment programs, in addition to how the treatment clinically is appropriate.

5. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
1. Brief about the Classification Of Nervous System and Identification of Various parts of Nervous System and their Function	2	8
2. Detailed Neurological assessment including assessment of Higher Mental Function, Cranial Nerve Examination, Motor, Sensory, Function and Ambulation.	2	8
3. Definition of Stroke, the causes and risk factors with detailed clinical presentation and Complete Rehabilitation	1	4
4. Definition, Clinical Features, Assessment and Treatment Of Guillain-Barré, Syndrome, Multiple sclerosis, Motor neuron disease and myasthenia gravis.	3	12
5. Definition, Clinical Features, Assessment and Treatment of Movement disorders. (Parkinsons disease, Basal ganglia disorders)	1	4

6. Classification Of Spinal Cord Injury, Assessment, Rehabilitation Protocol	1	4
7. Definition, Clinical Features, Assessment And Treatment Of Peripheral Nerve disorders.	1	4
8. Classification, Clinical Features Assessment and Treatment of Head Injury Patients.	1	4

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	32	--	--	16	--	48
Credit	2	--	--	1	--	3

3. Additional private study/learning hours expected for students per week.	2
--	---

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

mEvery course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.3	Describe the clinical manifestations, assessment and interventions for the diseases of nervous system.	Lecture, Lecture - demonstration & Class discussion by teacher,	➤ Written examination. ➤ Quiz.
<b>2.0</b>	<b>Cognitive skills</b>		
2.2	Select and prioritize the screening / examination tests, measures and essential interventions that are safe and meet the specified functional goals and outcomes in the plan of care for the patients with neurological disorders.	Case scenario method, educational films	➤ Written examination. ➤ Quiz. ➤ Case scenario based question
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
	Practice in an ethical manner, fulfilling an obligation to demonstrate moral responsibility and social justice that are consistent with the needs of patient and society.	Case scenario method	➤ Clinical examination
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
	Demonstrate the ability to document records and also critically appraise the information from research and reference source regarding the comprehensive neurological rehabilitation.	Case scenario method, educational films, Journal discussion	➤ Assignment ➤ Log book
<b>5.0</b>	<b>Psychomotor</b>		
5.1	Demonstrate competency in the execution of techniques in evaluation and management of patients with neurological disorders..	Clinical training, Bed side training, Case study videos	➤ Clinical examination.

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write

<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

5.

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1.	I <sup>st</sup> Mid term Theory Examination	6 <sup>th</sup>	15
2.	I <sup>st</sup> Mid term Clinical Examination	6 <sup>th</sup>	10
3.	II <sup>nd</sup> Mid term Theory Examination	12 <sup>th</sup>	10
4.	II <sup>nd</sup> Mid term Clinical Examination	13 <sup>th</sup>	10
5.	Quiz	14 <sup>th</sup>	5
6.	Log book	14 <sup>th</sup>	5
7.	Assisgnment	14 <sup>th</sup>	5
8.	Final clinical examination	16 <sup>th</sup>	10
9.	Final Theory examination	16 <sup>th</sup>	30

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Available in office hours depicted outside mu office.(10 hours per week)

#### E. Learning Resources

- List Required Textbooks

1. O'Sullivan SB, Schmitz TJ. Physical Rehabilitation. F.A. Davis Company; 5th edition. 2006.
2. Umphred DA, Lazaro RT, Roller ML, Burton GU. Neurological Rehabilitation. Elsevier, 6<sup>th</sup> Edition. 2013
3. Lord Walter Russell Brain, John Nicholas Walton, Brain's Diseases of the Nervous System, Oxford Univ Pr, 1993
4. Michael P. Barnes, Garth R. Johnson, Upper Motor Neurone Syndrome and Spasticity: Clinical Management and Neurophysiology, Cambridge University Press, 2001
5. Susan Edwards, Neurological Physiotherapy: A Problem-Solving Approach, Elsevier Health Sciences, 2001
6. Richard Greenwood, Neurological Rehabilitation, Psychology Press, 1997 Simon J. Ellis, Clinical

Neurology: Essential Concepts, Elsevier Health Sciences, 1998
2. List Essential References Materials (Journals, Reports, etc.)
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.) Neurology exam: <a href="http://www.neuroexam.com/">http://www.neuroexam.com/</a>
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.) 20
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> <li>➤ One computer in the classroom, and another in the lab.</li> <li>➤ Projector. (In both classroom and lab)</li> <li>➤ Smart board. (In both classroom and lab)</li> <li>➤ Data show. (In both classroom and lab)</li> <li>➤ Models</li> </ul>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> <li>➤ One computer in the classroom, and another in the lab.</li> <li>➤ Projector. (In both classroom and lab)</li> <li>➤ Smart board. (In both classroom and lab)</li> <li>➤ Data show. (In both classroom and lab)</li> <li>➤ Models</li> </ul>
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching: Questionnaire
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
3 Processes for Improvement of Teaching: PBL
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

**Faculty or Teaching Staff:** Dr. Mohamed Sherif (Male section)

**Signature:** \_\_\_\_\_

**Date Report Completed:** \_\_\_\_\_

**Course Coordinator:** Dr. Mohamed Sherif

**Signature:** \_\_\_\_\_

**Received by:** Dr. Fuzail Ahmad

**Department Head**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**



## Course Specifications

<b>Institution:</b> Majmaah University	<b>Date of Report:</b> 1435/1436H – 2 <sup>nd</sup> Semester
<b>College/Department :</b> College of Applied Medical Sciences / Department of Physical Therapy & Health Rehabilitation	

### A. Course Identification and General Information

<b>1. Course title and code:</b> Rehabilitation Psychology RHPT 473			
<b>2. Credit hours :</b> 2hours (2+0+0)			
<b>3. Program(s) in which the course is offered.</b> (If general elective available in many programs indicate this rather than list programs) <b>Physical Therapy &amp; Health Rehabilitation</b>			
<b>4. Name of faculty member responsible for the course:</b> 1. Salameh Al Dajah PhD PT			
<b>5. Level/year at which this course is offered</b> 7 <sup>th</sup> level, 4 <sup>th</sup> year			
<b>6. Pre-requisites for this course (if any):</b> NIL			
<b>7. Co-requisites for this course (if any)</b> NIL			
<b>8. Location if not on main campus</b> CAMS			
<b>9. Mode of Instruction (mark all that apply)</b>			
a. Traditional classroom	<input type="text" value="Yes"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other Practical	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
<b>Comments:</b>			

## B Objectives

1. What is the main purpose for this course?
✓ Demonstrate dynamics of psychosocial adaptation to disability.
✓ Implement Intervention strategies for people with disability.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
1. The Lectures should also be a part of updating their knowledge through continuous medical education (CME), periodically in rotational basis.
2. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)
3. Students will be encouraged to do the following:
a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

The course deals with the psychological aspect of disabled patient and the social care introduced for them. Identifying the risk factors of mental diseases and providing social intervention aiming to facilitate a positive change in the health behavior of patients.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
Mental Health Definitions, Dimensions of psychology The effect of Mental Illness Values: definition, types and Values in health professions Main Ethical Principles	01	2
Illness and hospitalization Psychological reaction to illness Impacts of illness Stages of hospitalization Crisis Intervention	01	2
Loss and grief Response to disability Types of Loss Grieving process Dimension of grieving Maslow hierarchy of needs Theories of grieving process Illness and depression	02	2



Physical problems from psychological sources Fight or flight Coping mechanism Physical signs and symptoms Somatoform disorders Hypochondriasis	01	2
<b>In Course Examination I (Mid Term Exam – Theory &amp; Practical)</b>	01	2
<b>The dynamics of psychosocial adaptation to disability</b> Basic concepts in disability adaptation Psychosocial responses (disability-triggered responses) Disability-associated coping strategies	02	4
<b>Assessment of psychosocial adaptation</b> 1.General measures of adaptation to disability: Millon Behavioral Health Inventory (MBHI), Psychosocial Adjustment to Illness Scale (PAIS) and Acceptance of Disability Scale (AD) 2. Specific measures of adaptation to disability	02	2
<b>Intervention strategies for people with disability</b> Major approaches to psychosocial interventions applied to people with disability: theory-driven interventions, psychosocial reaction-specific interventions and global clinical interventions Most Common Global Clinical Interventions	02	2
<b>Eating Disorders</b> Definition, factors contributes to eating disorder Theories about the nature of eating disorder Obesity: clinical presentation and treatment Sleeping disorder and suicide	01	2
<b>In course examination 2(Mid Term Exam – Theory &amp; Practical)</b>	01	2
<b>Dissociative disorders;</b> Self-concept, factors affect self- concept Possible causes of dissociation Coping mechanism with dissociative disorders	01	2
<b>Personality disorders:</b> Personality throughout the life cycle Theories relating to personality disorders Personality disorders are grouped into three clusters based on similar behaviors: Eccentric, Erratic and fearful.	01	2
<b>FINAL EXAM</b>	01	2

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30	0	0	0	0	30
Credit	2	0				2

3. Additional private study/learning hours expected for students per week.  
2 hours per week

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>a.0</b>	<b>Knowledge:</b> <i>By the end of the course, Students will be able to</i>		
a.1	Outline dimensions of mental health and effect of mental illness in physical handicapped persons.	Lecture, discussion, assignments homework	Short essay questions, multiple choice questions
a.2	Demonstrate different psychosocial theories and Intervention strategies for people with disability.	Lectures, Debate and group presentations	Short essay questions, multiple choice questions
<b>b.0</b>	<b>Cognitive Skills</b>		
b.1	Differentiate between models utilized in illness, hospitalization and psychosocial rehabilitation.	Small group discussions	Individual presentations.
b.2	Illustrate selection of the most appropriate model of psychosocial rehabilitation for each patient	Small group discussions/ group discussions	Midterms exams, individual presentations.
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1			
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
<b>5.0</b>	<b>Psychomotor</b>		
5.1			

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First midterm (Theory)	Week 6	20%
2	Participation	All along	5%
3	Quizzes	All along	5%
4	Assignments	All along	10%
	Second midterm	Week 13	20%
5	Final	Week 16	40%

#### D. Student Academic Counseling and Support

- |   |
|---|
| <p>1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)</p> <p>2 hours per course per week</p> |
|---|

#### E. Learning Resources

- |  |
|--|
| <p>1. List Required Textbooks</p> <p>Handbook of Rehabilitation Psychology by Robert G. Frank 2<sup>nd</sup> Edition 2009</p>  |
| <p>2. List Essential References Materials (Journals, Reports, etc.)</p>  |
| <p>3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)</p> <p>a. <a href="#">Michele J. Rusin</a>, <a href="#">E. Jongsma Jr.</a> The Rehabilitation Psychology Treatment Planner, 2001, Wiley INC, New York</p> <p>b. <a href="#">Dana Dunn</a>. <a href="#">The Social Psychology of Disability, 2014: OXFORD, New York</a></p>                  |
| <p>4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)</p> <p><a href="http://www.medsourceusa.com">www.medsourceusa.com</a></p> <p><a href="http://www.books.google.co.in">www.books.google.co.in</a></p> <p><a href="http://www.amazon.co.uk/">www.amazon.co.uk/</a></p>  |
| <p>5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p> <p><a href="http://www.powershow.com/view/3c6c34-M2YyN/Recovery_and_Psychiatric_Rehabilitation_powerpoint_ppt_presentation">http://www.powershow.com/view/3c6c34-M2YyN/Recovery_and_Psychiatric_Rehabilitation_powerpoint_ppt_presentation</a></p> |

#### F. Facilities Required

- |   |
|---|
| <p>Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)</p> |
| <p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <p>Class room accommodate 25 students</p>  |

2. Computing resources (AV, data show, Smart Board, software, etc.)
Laptop computer – Data show/Smart board
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
Data show to facilitate class room activities

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> <li>❖ A post midterm. open-ended questionnaire will be distributed to students to draw the instructor's attention to the weaknesses and strengths of his presentations</li> <li>❖ End-of-term university evaluation of course by students ( to be electronically completed by students)</li> <li>❖ End-of-term debriefing in class of students and teacher regarding what went well and what could have gone better</li> <li>❖ Periodical open discussion with students to survey their opinions on the degree of achievement of course goals and objectives</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
End-of-term evaluation of course by students ( to be electronically completed by students)
3 Processes for Improvement of Teaching
<ul style="list-style-type: none"> <li>❖ Attending workshops to facilitate the exchange of experiences amongst faculty members</li> <li>❖ Scheduling regular meetings with other colleagues where problems are discussed and solutions are given</li> <li>❖ Discussing the challenges in the classroom with colleagues and members of the Department Counsel</li> <li>❖ Encouraging faculty members to attend conferences on professional development</li> <li>❖ Keeping up to date with pedagogical theory and practice</li> <li>❖ Setting goals for achieving excellence in teaching at the beginning of each new semester after reviewing previous semester's teaching strategies and results and after considering students' feedback</li> <li>❖ Keeping up to date with refereed articles and books related to the topics of the course</li> </ul>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
<ul style="list-style-type: none"> <li>❖ Midterm papers are returned to students and model answers are given</li> <li>❖ Students may consult the reading materials and compare their answers to the information found in these sources</li> <li>❖ Students who believe they are under graded can compare their papers to those of their classmates who obtain high scores</li> </ul>



5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- ❖ Compare syllabi and course description to those found in other universities (including those on the Internet)
- ❖ Compare course objectives and goals to students' achievement
- ❖ Try to contact other professors in different universities who are teaching similar courses (including well-known institutions) to exchange views regarding the optimal ways to improve the course.

**Faculty or Teaching Staff:** Salameh Al Dajah PhD PT

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Received by:** \_\_\_\_\_ **Dean/Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_





**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**Clinical Practice in Pediatrics  
RHPT 474**

## Course Specifications

Institution: <b>Majmaah University</b>	Date of Report: <b>1435/1436H – 2<sup>nd</sup> Semester (18/1/2015)</b>
College/Department : College of Applied Medical Sciences / Department of Physical Therapy & Health Rehabilitation	

### A. Course Identification and General Information

1. Course title and code: Clinical Practice in Pediatrics, RHPT 474		
2. Credit hours: 2 hours (2+0)		
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Physical therapy program		
4. Name of faculty member responsible for the course Mr.Abdel Hamid Deghidi (male section)		
5. Level/year at which this course is offered: Level 7, 4 <sup>th</sup> year		
6. Pre-requisites for this course (if any) RHPT364		
7. Co-requisites for this course (if any)		
8. Location if not on main campus: CAMS		
9. Mode of Instruction (mark all that apply)		
a. Traditional classroom	<input type="checkbox"/> Yes What percentage?	<input type="text" value="100"/>
b. Blended (traditional and online)	<input type="checkbox"/> NA What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="checkbox"/> NA What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="checkbox"/> NA What percentage?	<input type="text" value="NA"/>
f. Other	<input type="checkbox"/> Yes What percentage?	<input type="text" value="NA"/>
Comments:		

## B Objectives

1. What is the main purpose for this course? ✓ This course provides the student with the required information about the techniques of application to treat various pediatric conditions. ✓ Planning and managing the appropriate way of application of treatment for various pediatric disorders.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field) 1. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.) 2. Students will be encouraged to do the following: a. Acquiring knowledge through the Internet, journals and verifying the other information resources. b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning. c. Conduct field visits to other department in hospitals.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

The course aims in applying modern clinical therapeutic physical therapy modalities in treatment of pediatric patients and its surgery. The principles and clinical therapeutic skills in treatment of patients in hospital.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
Developmental assessment of cerebral palsied children	01	4 hours
Assessment of muscle tone Reflex testing Abnormal posture and movement patterns Rolling over Sitting up from supine Sitting up from prone Crawling Sitting Four-foot kneeling Standing from sitting Walking	02	8 hours

Physical management General practical points in treatment Reflex inhibiting patterns Facilitation of normal posture and movement Specific points in treatment of different types of CP Home management	01	4 hours
Peripheral nerve lesion Assessment Treatment procedures Therapeutic exercises Electrical stimulation Home routine	01	4 hours
<b>In course examination 1(Mid Term Exam – Clinical)</b>	01	
Congenital anomalies Assessment - Degree of mobility - Extent of the deformity - Muscular strength and movement disorders - Functional activity - Associated disorders	02	8 hours
Treatment - Muscle reeducation program - Mobilization - Stretching procedures - Splinting -Surgical treatment -Post operative treatment	02	8 hours
<b>In course examination 2(Mid Term Exam – Clinical)</b>	01	
Genetic disorders Assessment Clinical features Enhancement of functional movement patterns. Stimulation of balance. Simulation of sensory and perceptual functions. Improvement of postural and movement control.	02	8 hours



Muscular diseases Assessment - Evaluation of functional activities - Respiratory assessment - Range of motion Treatment - Prevention of respiratory illness - Soft tissue contracture and deformity - Prevention of immobility and inactivity both mental and physical - Supportive treatment for parents	02	8 hours
<b>Revision</b>	01	
<b>Final practical examination</b>	01	

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours				60		60
Credit				2		2

3. Additional private study/learning hours expected for students per week.

2 hrs

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated

learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
a.3.1	The students will be able to <b>outline</b> motor development in normal child and potential factors influencing the acquisition of basic and functional motor abilities, developmental screening tests used for assessment children with developmental disorders. and describe the common disorders in pediatric	Demonstration & small and group discussion	case studies, log books, individual and group presentations
<b>B</b>	<b>Cognitive Skills</b>		
b.3.1	The students will be able to evaluate different cases of cerebral palsied children and construct safe and effective physiotherapy management according to patient and family needs .	debates, role playing, case studies	case studies, log books and group reports
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
c.2.1	The students will be able to demonstrate the oral responsibility and social justice to meet disabled children and family needs	Debates and case studies	case studies, log books
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
d.2.1	The students will be able to utilize the internet searching web sites to prepare topics in pediatric rehabilitation for case discussion	debate, small group work, whole group and small group discussion	case studies, log books
<b>E</b>	<b>Psychomotor</b>		
e.1.1	The students will be able to examine different patient in the rehab center and reach to construct a proper plan intervention	Hands-on student, role playing, case studies	case studies, log books

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
	estimate, explain, summarize, write, compare, contrast, diagram,

<b>Cognitive Skills</b>	subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct



Acad Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam – Clinical	6	25%
2	Second Midterm exam – Practical	11	25%
3	Assignments & presentations	13	10%
4	Final exam – Theory	16	40%



#### D. Student Academic Counseling and Support

Day	Dr. Abdelhamid
Sunday	
Monday	
Tuesday	8-10 A.m.
Wednesday	10-12 A.m.
Thursday	

#### E. Learning Resources

1. List Required Textbooks  Pediatric Physical Therapy by Jans Tecklin, Fourth Edition Physiotherapy in Pediatrics by Sophie lewitt
2. List Essential References Materials (Journals, Reports, etc.)
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc) Pediatric Physical Therapy by Jans Tecklin, Fourth Edition Physiotherapy in Pediatrics by Sophie lewitt Physical Therapy for Children by Suzann k. Campbell and Robert .J.Palisano
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)  <a href="http://www.apta.org">www.apta.org</a>  <a href="http://www.physio-med.com">www.physio-med.com</a>  <a href="http://www.medsorceusa.com">www.medsorceusa.com</a>  <a href="http://www.books.google.co.in">www.books.google.co.in</a>  <a href="http://www.amazon.co.uk/">www.amazon.co.uk/</a>  <a href="http://www.en.wikipedia.org/wiki">www.en.wikipedia.org/wiki</a> <a href="http://www.wcpt.org">www.wcpt.org</a>
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in



classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Hospital with pediatric patients (Rehab Center is suitable for 10- 15 students)
2. Computing resources (AV, data show, Smart Board, software, etc.) One computer in the classroom, and another in the lab.
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) <b>The list of detailed lab accessories and other required equipment's are attached.</b>

### G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching a. Written questionnaire at the end of the semester. b. Web based questionnaire at the end of semester.
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor a. Peer review b. Internal exam report analysis c. Course report analysis d. Mapping of Course Outcome.
3 Processes for Improvement of Teaching a. Efficient & effective use of teaching methods. b. Implementation and regulation of unified course outcomes and class objectives in both male & female sections. c. Unified assessment methods based on rubrics. d. Involvement of faculty members in various professional activities by attending frequent workshops/CME etc. for continuous up gradation of knowledge & skills.
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)  NA

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. a. Students feedback analysis b. Course report analysis c. Peer review report Based on these reports the department make the strategic action plan for each semester.
--

**Faculty or Teaching Staff:** \_1. Mr.Abdel Hamid Deghidi (Boys Section) &  
2.Mrs. Nivedita Kashyap (Girls Section)

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_





Received by: \_\_\_\_\_

Dean/Department Head

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

## Course Specifications

Institution: MAJMAAH UNIVERSITY	Date of Report JANUARY 2014
College/Department : COLLEGE OF APPLIED MEDICAL SCIENCES, PHYSICAL THERAPY & HEALTH REHABILITATION	

### A. Course Identification and General Information

1. Course title and code: <b>Physical therapy in Orthopedic conditions, RHPT475</b>		
2. Credit hours: 3 (2+0+1)		
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)		
4. Name of faculty member responsible for the course: <b>SALAMEH Al Dajah PhD PT</b>		
5. Level/year at which this course is offered: Level 7, fourth year.		
6. Pre-requisites for this course (if any) : RHPT366		
7. Co-requisites for this course (if any): NA		
8. Location if not on main campus: MAIN CAMPUS		
9. Mode of Instruction (mark all that apply)		
a. Traditional classroom	<input checked="" type="checkbox"/> What percentage?	50%
b. Blended (traditional and online)	<input checked="" type="checkbox"/> What percentage?	5%
c. e-learning	<input checked="" type="checkbox"/> What percentage?	5%
d. Correspondence	<input type="checkbox"/> NA What percentage?	NA
f. Other (clinical)	<input checked="" type="checkbox"/> What percentage?	40%
Comments: In this course the students are posted in orthopedic clinics and surgical ward and so clinical demonstrations are a major mode of Instructions.		

## B Objectives

1. What is the main purpose for this course? The course will provide students with knowledge and understanding of the musculoskeletal pathologies, the physical manifestations of such pathologies, the clinical reasoning process in clinical assessment and diagnosis, physical therapy treatment options, rationales and treatment selection.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field) 1. The usage of web based assistance to observe certain orthopaedic conditions. 2. The usage of IT in exploring the opportunities to learn the orthopaedic special tests and treatment skills

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
Introduction to orthopedic terminologies, Types of pathologies & importance of clinical examination.	1	2 Hours
Musculoskeletal pathology, overuse injuries and red flags	1	2 Hours
General Orthopedic assessment procedures to structures of Upper limb	2	4Hours
General Orthopedic assessment procedures to structures of Lower limb	2	4 Hours
Define Osteoarthritis; Review its signs, symptoms, radiological features, pathology, common deformities/ medical and Surgical management.	1	2 Hours
PT assessment, aims and management with special emphasis on osteoarthritis of hip, knee, ankle and shoulder joints.	2	4 Hours
Rheumatoid Arthritis, Ankylosing spondylitis, Review its signs, symptoms radiological features, pathology, common deformities, medical and Surgical management. PT assessment, aim and management in the acute and chronic stage and detailed home programmer.	2	2 Hours
PT assessment & management of Spinal problems. Cervical and lumbar spondylosis, Spondylolysthesis, IVDP.	2	4Hours
Postural abnormalities and the assessment procedures. Treatment plan for	2	4Hours

postural correction. Clinical features, management and complications of: septic arthritis, osteomyelitis, Tuberculosis (including spinal TB).		
Classify and outline the clinical features, management and complications of the following (benign / malignant bone and joint tumors).	1	2 Hours

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned.

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30 hours	NA	NA	NA	30 hours Clinical teaching	60 hours
Credit	2	NA	NA	NA	1	3 credits

3. Additional private study/learning hours expected for students per week.	NA
--	----

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>a.</b>	<b>Knowledge</b>		
a.1	<b>Recognize</b> the pathology of the orthopedic conditions related to the spine, upper extremities and lower extremities.	Lectures	Quizzes
a.2	<b>Describe</b> assessment and treatment procedures for orthopedic conditions	Small group discussions skill practice sessions	Case study report MCQS, Objective questions, short notes
<b>b.</b>	<b>Cognitive Skills</b>		
b.1	<b>Explain</b> the clinical significance of the results of the physical examination (including outcome measures), and confirm/negate your diagnostic hypotheses (differential diagnosis).	Lectures/ Class discussions/ Group discussion	Class participation Case study report Research review papers
b.2	<b>Justify</b> a physiotherapy intervention based upon clinical assessment and understanding of the literature	Individual meetings with students/ encouraging them to discuss paper topics outside the classroom with their peers	MCQS, Objective and SAQ & MCQ ( Scenario based questions)
<b>C.</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
c.1	<b>Analyze</b> the scope of medical investigations, diagnoses and medical management of orthopedic conditions within the medical ethics contest	Lectures/ Class discussions/ Group discussion	Case study report Research review papers MCQ & SAQ Log Book
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
d.1	<b>demonstrate</b> verbal and computerized communication with colleagues and patient to explain treatment plan	Demo, direct contact with patient, discussion and group discussion	MCQ, (scenario based questions) OSCUE, Log Book
d.2			
<b>e.</b>	<b>Psychomotor</b>		
e.1	<b>perform</b> safely a physiotherapy intervention for a patient with orthopedic problem and	Hand on demonstrations	Performance of skill under supervision of instructor





	evaluate his reactions	Demonstration videos	Log Book
		Real patient presentation	Clinical Reasoning

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Theory Exam – First Internals	6 <sup>th</sup>	15
2	Clinical skills evaluation – Midterm	10 <sup>th</sup>	10
3	second Theory Exam –	12 <sup>th</sup>	15
4	Logbook evaluation	13 <sup>th</sup>	10
5	Assignments & presentations	5 <sup>th</sup> & 12 <sup>th</sup>	10
6	Final Theory examination	16 <sup>th</sup>	30
7	Clinical skills evaluation	16 <sup>th</sup>	10

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

**Students can meet the faculty during the office hours mentioned in the schedule .**

#### E. Learning Resources

Dandy D, Edwards D. Essential Orthopaedics and Trauma:,  
Publication Date: August 10, 2009 | ISBN-10: 0443069425 | ISBN-13: 978-0443069420 | Edition: 4,  
Publisher: Churchill Livingstone, London

2. List Essential References Materials (Journals, Reports, etc.)

- [Ronald C. Evans DC FACO FICC](#). Illustrated Orthopedic Physical Assessment,  
Publication Date: December 29, 2008 | ISBN-10: 0323045324 | ISBN-13: 978-0323045322 |  
Edition: 3<sup>rd</sup>, Publisher: Mosby;
- Susan Edmond. Joint Mobilization/Manipulation. Second edition  
Publication date: 2006, [ISBN-13:978-0-323-02726-7]  
Publisher: Mosby, St Louis

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- Brukner P and Khan K (2012). Clinical Sports Medicine (4th Edition). Sydney: McGraw-Hill.
- Hengevel E and Banks K (2005). Maitland's peripheral manipulation (4th Edition). Edinburgh: Elsevier/Butterworth Heinemann.
- apta journal, australian journal. spine journal , sports journal,

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

- APTA ( American Physical Therapy Association)
- [www.apta.org](http://www.apta.org)
- [www.Youtube](http://www.Youtube) videos for manipulation and assessment.

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)  
Large class rooms : 30 students  
Laboratories:15 students

2. Computing resources (AV, data show, Smart Board, software, etc.)
<b>Smart board available in all class rooms</b>
2. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
<b>Continuous Passive motion equipment and other orthopedic devices for students practice is needed</b>

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<b>Web based Questionnaires given to students.</b>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
<b>Surprise tests and general competitive exams and quizzes</b>
3 Processes for Improvement of Teaching
<ul style="list-style-type: none"> <li>➤ <b>Adaptation to the recent Teaching methodologies, Analyzing the strength and weakness of the self-teaching methods from the student evaluation and peer group evaluation.</b></li> <li>➤ <b>Attending frequent workshops</b></li> <li>➤ <b>Conducting In house Seminars</b></li> </ul>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
<b>The students with academic excellence can be selected and should be allowed to interact and compete with other universities of the kingdom by a common competency exam.</b>



5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

**The curriculum committee formed in the college constantly reviews and evaluates the contents of the courses by comparing it with National and International bench marks and constantly planning is done according to the need of the community.**

Faculty or Teaching Staff: SALAMEH Al Dajah PhD PT

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Received by: \_\_\_\_\_ Dean/Department Head

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications**

**(CS)**

**RHPT476**

**Physical therapy for Burns & Surgical  
Section No: 915**

## Course Specifications

Institution: <b>Majmaah University</b>	Date of Report: 4.3.2015
College/Department : <b>College of Applied Medical Sciences/Physicaltherapy &amp;Health Rehabilitation.</b>	

### A. Course Identification and General Information

1. Course title and code: <b>Physical therapy for burn and surgical conditions RHPT476</b>			
2. Credit hours: 3 (2+0+1)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course Course Coordinator : U.Radhakrishnan <b>Section No : 915</b> Course Instructor: U.Radhakrishnan. <b>( Taught only in Male section in this semester )</b>			
5. Level/year at which this course is offered: <b>8<sup>th</sup> Level</b>			
6. Pre-requisites for this course (if any): Anatomy and Physiology, Therapeutic exercise I & II, Electrotherapy I & II and Measurements in Physical Therapy, Therapeutic Massage.			
7. Co-requisites for this course (if any)			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="na"/>	What percentage?	<input type="text" value="na"/>
c. e-learning	<input type="text" value="na"/>	What percentage?	<input type="text" value="na"/>
d. Correspondence	<input type="text" value="na"/>	What percentage?	<input type="text" value="na"/>
f. Other	<input type="text" value="na"/>	What percentage?	<input type="text" value="na"/>
Comments:			

## B Objectives

1. What is the main purpose for this course? <b>The main purpose is to recognize the basic concepts and skills about Burns and Surgeries that provide the scientific base upon which a practical problem solving ability can be developed for rendering Physical therapy treatment to various burns and surgical cases.</b>
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field) <ul style="list-style-type: none"> <li>• <b>The Lectures should also be a part of updating their knowledge through continuous medical education (CME), periodically in rotational basis.</b></li> <li>• <b>The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.</b></li> <li>• <b>Students will be encouraged to do the following:</b></li> <li>• <b>Acquiring knowledge through the Internet, journals and verifying the other information resources.</b></li> <li>• <b>Sharing the acquired knowledge with critical/lateral thinking &amp; clinical reasoning.</b></li> </ul>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached):

This course also introduces the student's about different degrees of burns, over view of medical problems, complications, assessment and its physical therapy management. The course also provides the student with the required information about the techniques of physical therapy treatment for the patient who undergoes surgical procedures.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
1. Burns : Introduction to burns, Classifications of burns	1	2
2. Superficial Partial-Thickness Burn, Deep Partial-Thickness Burn, Full-Thickness Burn Sub-dermal Burn.	1	2
3. Complications of burns : Infection, Metabolic complications, Pulmonary complications, Cardio vascular complication, Neuropathy and Assessment of Burns ( Rule of Nine).	1	2
4. Medical, Surgical and Physical therapy management of burns : Assessment and evaluation of Burns patient, Pre operative and Post operative physical therapy	1	2
5. Plastic surgery: Approaches for plastic surgeries, Indications for plastic surgery, Complications of surgeries and Physical therapy management for plastic surgeries.	2	4



6. Introduction to surgeries: Effects of anesthesia and Abdominal surgeries: Incisions for abdominal surgeries, Indications for abdominal surgery, Complications of Appendisectomy, Gastrectomy, Nephrectomy and Cholecystectomy.	2	4
7. Complications of : Colostomy, Laparotomy, Mastectomy, Hysterectomy and Physical therapy management for abdominal surgeries - Pre operative & Post operative physical therapy.	3	6
8. Cardio respiratory surgeries: Incisions for cardio respiratory surgeries, Indications of cardio respiratory surgery, Complications of Thoracotomy Thoracoplasty, Lobectomy, Pneumonectomy and Decortications.	2	4
9. Neuro surgeries: Approaches for neurological surgeries, Indications for neurological surgery, Complications of surgeries of Hydrocephalus & Spina bifida and Physical Therapy Management	1	2

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30	-	-	30	-	60
Credit	2	-	-	1	-	30

3. Additional private study/learning hours expected for students per week.	2 Weeks
--	---------

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

Every course is not required to include learning outcomes from each domain.			
	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
A	Knowledge		
A3.1	The students will be able to memorize the knowledge about burns & General surgeries thereby recognizing its contemporary issues including its specific & general complications.	Lectures, class discussion by teacher, open text book study, homework & practice, Summarizing & note taking, daily re-looping of previously learned material.	Written Exams using - (MCQ, SAQ) & Quiz (Oral) – using RUBRICS
A3.2	The students will be able to describe the medical, surgical & its relevant physical therapy management based on the scientific evidences.		
B	Cognitive Skills		
B3.1.	The student will be able to explain the various assessment methods for burns & surgical patients.	Lectures, Case presentation method, educational films,	Written Exams using - (MCQ, SAQ, Case Study) & Quiz (Oral) – using RUBRICS
B3.2	The student will be able to justify the appropriate Physical therapy interventions based on their assessment in burns & surgical patients.		
C	Interpersonal Skills & Responsibility		
C2.1	The students will be able to demonstrate the moral responsibility of Physical Therapist in collecting, organising information and ideas of Rehabilitation methods in an ethical manner.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, Practical demonstrations.	Practical Exam using Rubrics
D	Communication, Information Technology, Numerical		
D2.1.	The student will be able to appraise the use of the latest technology to collect the	Recitation, debate, use of technology &	Logbooks, Assignments using Rubrics.

	information and update the Research evidences in treatment of Burns and Surgical patients.	instructional resources, faculty website, e-mail	
<b>E</b>	<b>Psychomotor</b>		
E1.1.	The student will be able to perform a holistic approach of physiotherapy management to burns & surgical patients, acknowledging individual differences.	Teacher demonstration, Nonlinguistic representation (Physical models, Role playing, Hands on, active participation	Practical exam –Using RUBRICS
E1.1.2	The student will be able to examine the effectiveness and efficiency of interventions by using appropriate re-evaluation and/or valid and reliable outcome measures.		

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

**5. Schedule of Assessment Tasks for Students During the Semester:**

	Assessment task	Week Due	Proportion Of Total Assessment
1	Quizzes	Throughout the course	5%
2	First Midterm exam - Theory	6	10%
3	First Midterm exam - Clinical	6	10%
4	Second Midterm exam - Theory	12	10%
5	Second Midterm exam - Clinical	12	10%
6	Practical Log Book	Throughout the course	10%
7.	Assignment	9 <sup>th</sup> week	5%
8.	Final exam - Theory	16	30%

9.	Final clinical Exam	15	10%	
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#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Sunday: 10-12 am

#### E. Learning Resources

##### 1. List Required Textbooks :

- ❖ Acute care handbook for Physical Therapists, .Jaime C paz, 2<sup>nd</sup> edition, Butterworth Heinmann
- ❖ Text book of burn care and rehabilitation,2009
- ❖ Text book of essential surgery,2008

##### 2. List Essential References Materials :

- [www.apta.org](http://www.apta.org)
- [www.physio-med.com](http://www.physio-med.com)
- [www.medsourceusa.com](http://www.medsourceusa.com)
- [www.books.google.co.in](http://www.books.google.co.in)
- [www.wcpt.org](http://www.wcpt.org)

##### 3. List Recommended Textbooks and Reference Material :

- 1- Chronic wound management "The evidence for chance "2003
- 2- Burn care and rehabilitation ( Richard and staley). 1994.
- 3- Clinical wound management (Gogia, 1995).
- 4- Journal of burn care and rehabilitation
- 5- Journal of burns
- 6- American Journal of physical therapy
- 7- Journal of physiotherap

##### 4. List Electronic Materials :

- 1- Journal of Burn care and rehabilitation
- 2- Journal of burns
- 3- [www.physiotherapy.com](http://www.physiotherapy.com)
- 4- [www.medicin.com](http://www.medicin.com)
- 5- [www.Lancet.com](http://www.Lancet.com)

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

### 1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

1. Lecture room suitable for 25 students provided with smart board
- Lab for practical sessions as some of the Clinical demonstrations are continued in Labs.  
Demonstration rooms in Hospitals for evaluating patients.

<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> <li>➤ data show</li> <li>➤ Smart Board</li> <li>➤ software</li> </ul>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p>

## G Course Evaluation and Improvement Processes

<p><b>1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching:</b></p> <ul style="list-style-type: none"> <li>a. Asking question before, during and after each lecture</li> <li>b. Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</li> <li>c. Through evaluation of the course by student at their web site</li> </ul>
<p><b>2. Other Strategies for Evaluation of Teaching by the Program/Department Instructor :</b></p> <p>Frequent feedback from the students &amp; clarification of doubts now &amp; then feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff.</p>
<p><b>3 Processes for Improvement of Teaching :</b></p> <ul style="list-style-type: none"> <li>a. Attending frequent workshops in Saudi Arabia for update of latest trends in the field of physical therapy</li> <li>b. Efficient &amp; effective use of teaching methods (RUBRICS and other related form of teaching methods)</li> <li>c. Planning to make online student based training</li> <li>d. Planning to make tutorial by webinars</li> <li>e. Easy &amp; illustrative examples</li> </ul>
<p><b>4. Processes for Verifying Standards of Student Achievement</b></p> <ul style="list-style-type: none"> <li>a. Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</li> <li>b. Matrix – Mapping</li> <li>c. Peer review / department council committee review</li> </ul>
<p><b>5 Describe the planning arrangements for periodically reviewing course Effectiveness and</b></p>



**planning for improvement :**

- a. Continuous evaluation of the students during the term, and frequent updating of the course content.
- b. Planning to make exams online
- c. Planning to conduct online surveys

Faculty or Teaching Staff: **U.Radhakrishnan.**

**Signature:** \_\_\_\_\_ **Date Report completed:** \_\_\_\_\_

**Course Coordinator: U.Radhakrishnan**

**Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad**

**Department Head**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**Physical Therapy for Respiratory Disorders  
RHPT 481**

## Course Specifications

Institution	Majmaah University	Date of Report: 1435/1436H (2 <sup>nd</sup> semester)
College/Department : College of Applied Medical Sciences / Department of Physical Therapy & Health Rehabilitation		

### A. Course Identification and General Information

1. Course title and code: <b>Physical Therapy for Respiratory diseases &amp; RHPT 481</b>			
2. Credit hours: 3 hrs			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Physical Therapy &amp; Health Rehabilitation</b>			
4. Name of faculty member responsible for the course Course Coordinator : Dr. Mohamed Seyam (Section:917, 918) Course Instructors <b>1. Mr. Hariraja Muthusamy</b> (Section: 926, 927) <b>2. Mrs: Nivedita P. Kashyap</b> (Section:169, 170, 179)			
5. Level/year at which this course is offered: <b>8<sup>th</sup> level / 4<sup>th</sup> year</b>			
6. Pre-requisites for this course (if any): RHPT 243, RHPT 354			
7. Co-requisites for this course (if any): NA			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course? This course provides the student with the required information about the assessment and techniques of application to treat various acute & chronic Respiratory conditions.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field) The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.) 2. Students will be encouraged to do the following: a. Acquiring knowledge through the Internet, journals and verifying the other information resources. b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning. c. Conduct field visits to electrotherapy department in hospitals.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
<b>Anatomy and Physiology of Respiratory system:</b> <ul style="list-style-type: none"> <li>Anatomy includes Respiratory tract, Broncho pulmonary segment,</li> <li>Muscles of Ventilation,</li> <li>Surface Anatomy of lungs,</li> <li>Lung Volumes and Capacities</li> <li>Physiology of breathing mechanics and pulmonary circulation</li> </ul>	1	4
<b>Examination and Assessment procedures of Respiratory disorders</b> <ul style="list-style-type: none"> <li><b>Subjective Assessment-</b></li> <li>Patient Information,</li> <li>Chief complaints,</li> <li>Past Medical History, Present Medical History.</li> <li><b>Objective Assessment</b></li> <li>-On Inspection,</li> <li>On Palpation,</li> <li>On Percussion,</li> <li>On Auscultation,</li> <li>On Examination.</li> </ul>	2	8

<b>Physical Therapy Intervention for Pulmonary diseases</b> <ul style="list-style-type: none"> <li>Breathing exercise,</li> <li>Thoracic mobilization techniques,</li> <li>Inspiratory muscle training,</li> <li>Airway clearance techniques and Mechanical ventilators</li> </ul>	2	8
<b>PT for Chronic Obstructive Pulmonary Disorders (COPD):</b> <ul style="list-style-type: none"> <li>Bronchial Asthma,</li> <li>Chronic Bronchitis and</li> <li>Emphysema</li> </ul>	2	8
<b>In course examination 1 (Mid Term Exam – Theory)</b>		
<b>PT for Restrictive Pulmonary Disorders(RLD)</b> Pleural Effusion, Pneumothorax, Hemothorax, and Empyema. Chest deformities: Pectus carinatum, Pectus Excavatum, Scoliosis, Kyphosis and Kyphoscoliosis	2	8
<b>PT for Suppurative lung diseases (SLD)</b> <ul style="list-style-type: none"> <li>Pneumonia, and atelectasis</li> <li>Pulmonary Tuberculosis</li> <li>Cystic fibrosis</li> <li>Lung abscess</li> <li>Bronchiectasis.</li> </ul>	2	8
<b>PT Management of Respiratory Failure</b> <ul style="list-style-type: none"> <li>Type I Respiratory Failure and</li> <li>Type II Respiratory Failure</li> </ul>	1	4
<b>In course examination 2 (Mid Term Exam – Theory)</b>		
<b>PT for Occupational Lung Diseases (OLD)</b> <ul style="list-style-type: none"> <li>Asbestosis,</li> <li>Silicosis,</li> <li>Byssinosis,</li> <li>Coal workers pneumoconiosis.</li> </ul>	1	4
<b>Intensive care Unit</b> <ul style="list-style-type: none"> <li>Invasive and noninvasive Monitoring Equipment's,</li> <li>Oxygen Delivery Devices, Chest Tube, and</li> <li>Life Support Equipment</li> <li>Physical therapy role in ICU</li> </ul>	2	8
Final clinical / Theory examination		

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30			30		60
Credit	2			1		3

3. Additional private study/learning hours expected for students per week.

2hr

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A3.1	Describe the pathology and/or presentation of respiratory, and/or surgical, conditions relevant to physiotherapy, applicable across the lifespan	Lecture, Lecture - demonstration & class discussion by teacher, Text book assignments, open text book study, homework & practice, summarizing & note taking, daily re-looping of previously learned material	M.C.Q, S.A.Q, Log book, Written & Viva Voce
A3.2	Describe the theory and rationales of treatment interventions available in thoracic physiotherapy, applicable across the lifespan		
<b>B</b>	<b>Cognitive Skills</b>		
B3.1	Design & reconstruct the rehabilitation	Case method, use of	Scenario based question,

	process for each Respiratory patient and to Measure the effectiveness of the treatment	motion pictures, educational films, pod cats & video tapes	Case study question
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
C2.1	Judge & appraise the skills in Assessment, planning, implementing, and evaluating safe and effective management.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Clinical case presentation and Demonstrations
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
D2.1	Implement professional code of ethics while dealing with patients	Explanation, Practical Demonstration Practice	Practical Exam, Log book
<b>E</b>	<b>Psychomotor</b>		
E1.1	Demonstrate effective clinical reasoning to select and perform appropriate assessments in the area of Respiratory physiotherapy, applicable across cultural and age groups.	Teacher demonstration, Nonlinguistic representation (Physical models, Kinesthetic representations), Simulation/ Role playing, Hands on, active participation	Demonstration / Case presentation Practicals using rubrics
E1.2	Plan the Rehabilitation program in the management of Respiratory diseases.		

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First midterm exam - theory	6	15%
2	midterm exam - clinical case presentation	9	20%
3	Second midterm exam - theory	12	15%
4	quizzes	4-14	10%
5	Final exam clinical – Clinical Case presentation	16	10%
6	Final exam - theory	17	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)  
**Students can meet the Respective faculty member on their office hour.**

#### E. Learning Resources

1. List Required Textbooks
  - Essentials of Cardio Pulmonary Physical Therapy; Hillegass and Sadowsky, 3rd edition, Elsevier.
  - Cardio Pulmonary Physical Therapy-A Guide to practice; Scot Irwin, Jan Stephen Teclin, 4th edition, Mosby
2. List Essential References Materials (Journals, Reports, etc.)
  - Cardiovascular and Pulmonary Physical Therapy: Evidence and Practice ; Donna Frownfelter, Elizabeth Dean PhD, 3rd Edition, Mosby
  - The Brompton Hospital Guide to Chest physical Therapy , Gaskell D.V. and Webber B.A Published by Blackwell Scientific Publication
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
  - Cardio Pulmonary Physical Therapy- A clinical manual; Joanne Watchie, 3rd edition
  - Physiotherapy for Respiratory and Cardiac problems; Jennifer A.Pryor, S.Ammani Prasad, 3rd edition.
  - Cardiovascular/Pulmonary Essentials: Applying the preferred Physical Therapist practice patterns; Marilyn Moffat.
  - Pulmonary Rehabilitation: Guidelines to success; John Elliot Hodgkin, BartolomeR.Celli, Gerilynn Long Connors.
  - Egan's Fundamentals of Respiratory care; Donald F.Egan, Craig L.Scanlan, Robert L.Wilkins, James K.Stoller.
  - Cash's Textbook; Chest, heart, and vascular disorder for Physical therapy, Patricia A. Dowine , published by Faber and Faber , London.
  - Tidy's physiotherapy; Stuart B. Porter, 13th edition
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)
  - [www.apta.org](http://www.apta.org)
  - [www.physio-med.com](http://www.physio-med.com)
  - [www.medsourceusa.com](http://www.medsourceusa.com)
  - [www.en.wikipedia.org/wiki](http://www.en.wikipedia.org/wiki)
  - [www.wcpt.org](http://www.wcpt.org)
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.  
  
computer-based programs/CD, professional standards/regulations

#### F. Facilities Required



Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> <li>• Classrooms, laboratories, demonstration rooms/labs, etc.)</li> <li>• Lecture room suitable for 25 students.</li> <li>• Separate Practical lab suitable for students</li> </ul>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> <li>• One computer in the classroom,</li> <li>• Projector. (In classroom)</li> <li>• Smart board. (In classroom)</li> <li>• Data show. (In classroom)</li> </ul>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> <li>• Written questionnaire at the end of the semester.</li> <li>• Web based questionnaire at the end of semester</li> </ul>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p> <ul style="list-style-type: none"> <li>• Peer review</li> <li>• Internal exam report analysis</li> <li>• Course report analysis</li> <li>• Mapping of Course Outcome.</li> </ul>
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> <li>• Efficient &amp; effective use of teaching methods.</li> <li>• Implementation and regulation of unified course outcomes and class objectives in both male &amp; female sections.</li> <li>• Unified assessment methods based on rubrics.</li> <li>• Involvement of faculty members in various professional activities by attending frequent workshops/CME etc. for continuous up gradation of knowledge &amp; skills</li> </ul>

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent member teaching staff of a sample of student work.
- Periodic exchange and remarking of tests or a sample of assignments with staff at another institution.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Students feedback analysis
- Course report analysis
- Peer review report

**Faculty or Teaching Staff: Mr. Hariraja Muthusamy & Ms. Nivedita .P. Kashyap**

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Course Coordinator: Dr. Mohamed Seyam** **Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad** **Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**PHYSICAL THERAPY FOR CARDIOVASCULAR DISORDERS**

**RHPT 482**

**2<sup>nd</sup> Semester 1435-1436**

## Course Specifications

Institution	<b>MAJMAAH UNIVERSITY</b>	Date of Report: <b>25<sup>TH</sup> JANUARY 2015</b>
College/Department:	<b>COLLEGE OF APPLIED MEDICAL SCIENCES</b>	

### A. Course Identification and General Information

1. Course title and code: <b>PT in CARDIOVASCULAR DISORDERS</b>			
2. Credit hours: <b>3 (2+0+1)</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>PHYSICAL THERAPY PROGRAM</b>			
4. Name of faculty member responsible for the course <div style="display: flex; justify-content: space-between;"> <div> <p>Course Coordinator : <b>Dr. MOHAMED SEYAM</b></p> <p>Course Instructors <b>1. PRASHANT P. KASHYAP</b> <b>2. MINAZ S. SHAIKH</b></p> </div> <div> <p><b>(Section:929 / 930)</b></p> <p><b>(Section:919 / 920)</b></p> <p><b>(Section:171 / 172 / 182)</b></p> </div> </div>			
5. Level/year at which this course is offered: <b>8<sup>th</sup> level, 4<sup>th</sup> year</b>			
6. Pre-requisites for this course (if any): <b>RHPT 243, RHPT 354</b>			
7. Co-requisites for this course (if any): <b>NA</b>			
8. Location if not on main campus: <b>NA</b>			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course?

This course provides the student with the required information about the techniques of application to treat various acute & chronic cardiac conditions. Planning and managing the appropriate way of application of treatment for various cardiovascular disorders. This course also serves to integrate the knowledge gained by the students in clinical cardiac conditions with the skills gained in exercise therapy, electrotherapy and massage, thus enabling them to apply these in clinical situations-of dysfunction due to pathology.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

1. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)
  2. Students will be encouraged to do the following:
    - a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
    - b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.
- Conduct field visits to electrotherapy department in hospitals.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

### 1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours
<b>Normal Cardiac Anatomy &amp; Physiology</b> Myocardial Oxygen Supply / Demand Contractility Electrical Conduction Blood flow through heart Coronary arteries Blood vessels	Week 1	04
<b>Assessment of Cardiovascular disorders</b> Subjective Assessment	Week 2	04



<b>Objective Assessment</b> On Inspection On Palpation On Percussion On Auscultation On Examination On Investigation	Week 3	04
<b>Clinical Tests and Measurements</b> Electrocardiogram(ECG) Exercise Tolerance Test(ETT)	Week 4&5	08
<b>Cardiac Rehabilitation</b> Definition and concept of cardiac rehab. Significant and Goals of cardiac rehab. Phases of cardiac rehab.	Week 6	04
<b>In course examination 1(Mid Term Exam – Theory &amp; Clinical)</b>	Week 7	
<b>Aerobic Exercise Prescription, Home Exercise Program</b>	Week 8	04
<b>Assessment and Management of Cardiac Disorders</b> <b>Coronary Artery Disease</b> Clinical Manifestation Medical and surgical management Physical Therapy Intervention	Week 9	04
<b>Myocardial Infarction</b> Clinical Manifestation Medical and surgical management Physical Therapy Intervention	Week 10	04
<b>Congenital Heart Disease</b> Cyanotic and acyanotic lesions Common defects Medical and surgical management Physical Therapy Intervention	Week 11	04
<b>In course examination 2(Mid Term Exam – Theory &amp; Clinical)</b>	Week 12	
<b>Peripheral vascular diseases</b> Arterial diseases Venous diseases Lymphatic disorder	Week 13&14	08
<b>Final practical examination</b>	Week 15	
<b>Final Theory examination</b>	Week 16	



2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30			30		60
Credit	2			1		3

3. Additional private study/learning hours expected for students per week.	5 hrs
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.3.1	Recall anatomy and physiology of Cardiovascular system. Signs & symptoms of normal and abnormal cardiovascular system.	Lecture, Lecture - demonstration & class discussion by teacher, Text book assignments, open text book study, homework & practice, summarizing & note taking, daily re-looping of previously learned material	M.C.Q & S.A.Q
1.3.2	Identify the different types of investigative procedures used in diagnosis of cardiovascular disorders.		
1.3.3	Outline the Physical Therapy assessment of patient with cardiovascular problem and different treatment protocols for patients with cardiac disorders.		
2.0	Cognitive Skills		
2.3.1	The student will interpret results of, patient/client examination and other investigative procedures, for appropriate physical therapy diagnosis and prognosis	Case method, use of motion pictures, educational films, pod cats & video tapes	Scenario based question, Case study question
2.3.2	Develop an effective and safe evidence-based physiotherapy intervention plan prioritized in order to address assessment findings, while aiming to achieve the individual's treatment goals.		
3.0	Interpersonal Skills & Responsibility		
3.2.1	Demonstrate an understanding of the presentation and management of a wide range of cardiovascular problems while being respectful and sensitive to individual client needs.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Clinical case presentation and worksheets
4.0	Communication, Information Technology, Numerical		
4.2.1	Demonstrate the appropriate level of approach to interrelate with families and other health care professionals.		
5.0	Psychomotor		
5.1.1	Perform safely the application of different cardiovascular physical therapy techniques in cardiac disorders.	Teacher demonstration, Nonlinguistic representation (Physical models,Simulation/ Role playing, Hands on, active participation	Practical demonstration / case presentation with the model



### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
Knowledge	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
Cognitive Skills	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
Interpersonal Skills & Responsibility	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
Communication, Information Technology, Numerical	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

#### Suggested assessment methods and teaching strategies are:

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam – Theory	7	15%
2	Midterm exam clinical– Clinical Case presentation	9	20%
3	Second Midterm exam – Theory	12	15%
5	quizzes	5-13	10%
6	Final exam clinical – Clinical Case presentation	14	10%
7	Final exam – Theory	15	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)			
Day	Dr. Seyam	Mr. Prashant	Mrs. Minaz
Sunday			
Monday		8:00 am – 10:00 am	
Tuesday		8:00 am – 10:00 am	
Wednesday			
Thursday		8:00 am – 10:00 am	

#### E. Learning Resources

1. List Required Textbooks <b>Essentials of Cardio Pulmonary Physical Therapy; Hillegass and Sadowsky, 3<sup>rd</sup> edition.</b>
2. List Essential References Materials (Journals, Reports, etc.) <ul style="list-style-type: none"> <li><b>Cardio Pulmonary Physical Therapy-A Guide to practice; Scot Irwin, Jan Stephen Teclin, 3<sup>rd</sup> edition.</b></li> <li><b>Cardiovascular and Pulmonary Physical Therapy: Evidence and Practice ; Donna Frownfelter, Elizabeth Dean PhD</b></li> </ul>
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc) <ul style="list-style-type: none"> <li><b>Cardio Pulmonary Physical Therapy- A clinical manual; Joanne Watchie, 3<sup>rd</sup> edition</b></li> </ul>

<ul style="list-style-type: none"> <li>• <b>Physiotherapy for Respiratory and Cardiac problems; Jennifer A.Pryor, S.Ammani Prasad, 3<sup>rd</sup> edition.</b></li> <li>• <b>Cardiovascular/Pulmonary Essentials: Applying the preferred Physical Therapist practice patterns; Marilyn Moffat..</b></li> <li>• <b>Cash's Textbook; Chest, heart, and vascular disorder for Physical therapy, Patricia A. Dowine , published by Faber and Faber , London.</b></li> <li>• <b>Tidy's physiotherapy; Stuart B. Porter, 13<sup>th</sup> edition</b></li> </ul>
<p>4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)</p> <ul style="list-style-type: none"> <li>• <a href="http://www.apta.org">www.apta.org</a></li> <li>• <a href="http://www.physio-med.com">www.physio-med.com</a></li> <li>• <a href="http://www.medsourceusa.com">www.medsourceusa.com</a></li> <li>• <a href="http://www.books.google.co.in">www.books.google.co.in</a></li> <li>• <a href="http://www.amazon.co.uk">www.amazon.co.uk</a></li> <li>• <a href="http://www.en.wikipedia.org/wiki">www.en.wikipedia.org/wiki</a></li> </ul>
<p>5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p>

## F. Facilities Required

<p>Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)</p>
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> <li>• <b>Lecture room suitable for 25 students.</b></li> <li>• <b>Separate Practical lab suitable for students.</b></li> </ul>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> <li>• <b>One computer in the classroom, and another in the lab.</b></li> <li>• <b>Projector. (In both classroom and lab)</b></li> <li>• <b>Smart board. (In both classroom and lab)</b></li> <li>• <b>Data show. (In both classroom and lab)</b></li> </ul>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> <li>• <b>Asking question before, during and after each lecture</b></li> <li>• <b>Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</b></li> </ul>
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<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p> <ul style="list-style-type: none"> <li>• <b>Frequent feedback from the students &amp; clarification of doubts now &amp; then</b></li> <li>• <b>Feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff.</b></li> </ul>
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> <li>• <b>Attending frequent workshops</b></li> <li>• <b>Efficient &amp; effective use of teaching methods</b></li> <li>• <b>Easy &amp; illustrative examples</b></li> </ul>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"> <li>• <b>Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</b></li> <li>• <b>Matrix – Mapping</b></li> <li>• <b>Peer review / department council committee review</b></li> </ul>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <p><b>Continuous evaluation of students during the term, and frequent updating of the course content.</b></p>

**Faculty or Teaching Staff: Mr. Prashant P. Kashyap , Mrs. Minaz S. Shaikh**

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Course Coordinator: Dr. Mohamed Seyam** **Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad** **Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

## Course Specifications

Institution Majmaah University Date of Report 18.01.2015
College/Department College of Applied Medical Sciences / Department of Physical Therapy & Health Rehabilitation

### A. Course Identification and General Information

1. Course title and code: Geriatric Rehabilitation / RHPT 483			
2. Credit hours 3 (2+1+0)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course <div> <div>Course Coordinator :</div> <div>Dr. Mohamed Sherif (Section:921, 922, 931, 932)</div> </div> <div> <div>Course Instructors</div> <div>Ms. Savita Singh (Section:173,174&amp;181)</div> </div>			
5. Level/year at which this course is offered 8 <sup>th</sup> level /4 <sup>th</sup> year			
6. Pre-requisites for this course (if any) NA			
7. Co-requisites for this course (if any) RHPT 481 & RHPT 482			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

<p>1. What is the main purpose for this course? Upon the completion of this course, students should be able to:</p> <ul style="list-style-type: none"> <li>• Identify goals and functions of rehabilitation.</li> <li>• Demonstrate the basic principles related to rehabilitatory methods.</li> <li>• Identify the effects of rehabilitation..</li> <li>• Acquisition of adequate theoritical and practical knowledge.</li> <li>• Develop confidence and seek further knowledge in the fields of physiotherapy.</li> <li>• Acquire competency in planning and imparting the physiotherapeutic measure in the field of prevention, curative, and rehabilitative goals.</li> <li>• Proficiency in the diagnosis and skills of basic physiotherapy procedures and techniques.</li> <li>• Acquire knowledge about factors affecting aging.</li> <li>• Knowledge regarding relationship between society and aging.</li> </ul>
<p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <ul style="list-style-type: none"> <li>• Presentations should be given on projectors.</li> <li>• Slide show should be there during delivering the lectures.</li> <li>• Group discussions should be held</li> </ul>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
1. Introduction to Geriatric Rehabilitation	1	4
2. Selected theories of ageing	2	4
3. Physiological and Pathological manifestations of ageing	3	4
4. Principles and Practice of Geriatric Rehabilitation	4 & 5	8
5. Geriatric Assessment	6 & 7	8
6. Physical therapy for selected orthopaedic conditions in elderly	8 & 9	8
7. Physical therapy for selected neurological conditions in elderly	10 & 11	8

<b>In course examination 2(Mid Term Exam – Theory &amp; Clinical)</b>		
8. Physical therapy for selected cardiopulmonary and cardiovascular conditions in elderly	12 & 13	8
<b>Revision</b>	14	4
<b>Final examination – Clinical</b>	15	
<b>Final examination – Theory</b>	16	



2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	2x15=30	NA	NA	2x15=30	NA	60
Credit	2	NA	NA	1	NA	3

3. Additional private study/learning hours expected for students per week. <b>NA</b>
--

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.3.1	Describe the different theories of aging, various physiological and pathological age related changes, diseases, assessment and intervention among elderly.	Lecture, Lecture - demonstration & Class discussion by teacher,	➤ Written examination. ➤ Quiz.
<b>2.0</b>	<b>Cognitive Skills</b>		
2.3.1	Select and prioritize the screening / examination tests, measures and essential interventions that are safe and meet the specified functional goals and outcomes in the plan of care for the aged.	Case scenario method, educational films	➤ Written examination. ➤ Quiz. ➤ Case scenario based question
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.2.1	Practice in an ethical manner, fulfilling an obligation to demonstrate moral responsibility and social justice that are consistent with the needs of patient and society.	Case scenario method	➤ Clinical examination
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.2.1	Demonstrate the ability to document records and also critically appraise the information from research and reference source regarding the comprehensive rehabilitation of elderly.	Case scenario method, educational films, Journal discussion	Assignment, Log book
<b>5.0</b>	<b>Psychomotor</b>		
5.1.1	Demonstrate competency in the execution of techniques in evaluation and management of clinical problems in aged population.	Clinical training, Bed side training, Case study videos	➤ Clinical examination.

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise



<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam – Theory	6	15%
2	First Midterm exam – Clinical	7	10%
3	Second Midterm exam – Theory	12	10%
4	Second Midterm exam – Clinical	13	10%
	Quiz	1-14	5%
5	Assignment	1-14	5%
6	Log book	1-14	5%
7	Final exam – Clinical	15	10%
8	Final exam – Theory	16	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

**Students can meet the faculty during the office hours mentioned in the schedule.**

#### E. Learning Resources

##### 1. List Required Textbooks

Geriatric Rehabilitation – A Clinical Approach	Carole B. and Jennifer M	Prentice Hall PTR	3 <sup>rd</sup> edition, 2008
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##### 2. List Essential References Materials (Journals, Reports, etc.)

Foundation of Geriatric Physical Therapy	Guccion A.	Mosby	2010
Physical Therapy of the Geriatric Patients	Jakson O.	Churchill Livingstone	2008

##### 3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

Geriatric Rehabilitation – A Clinical Approach, Carole B. and Jennifer M  
Prentice Hall PTR  
3<sup>rd</sup> edition, 2008

##### 4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

[www.physio-med.com](http://www.physio-med.com)  
[www.books.google.co.in](http://www.books.google.co.in)

##### 5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

##### 1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- Rooms should be comfortable according to the strength of the students.
- Proper placement of projector and Data show should be there.

<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> <li>➤ All necessary equipments</li> <li>➤ One computer in the classroom, and another in the lab.</li> <li>➤ Projector. (In both classroom and lab)</li> <li>➤ Data show. (In both classroom and lab)</li> <li>➤ Models</li> </ul>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ol style="list-style-type: none"> <li>a. Asking question before, during and after each lecture</li> <li>b. Provision of appraisal form to the students &amp; to rectify changes if any</li> <li>c. Exams</li> <li>d. Assignments</li> </ol>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p>
<p>3 Processes for Improvement of Teaching</p> <ol style="list-style-type: none"> <li>a. Attending frequent workshops</li> <li>b. Efficient &amp; effective use of teaching methods</li> <li>c. Easy &amp; illustrative examples</li> </ol>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <p>a. Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field</p>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ol style="list-style-type: none"> <li>1. Peer review of the course taught</li> <li>2. Stake holder's feedback on the course taught.</li> <li>3. Keeping track of any recent advances in the field of physical therapy.</li> </ol>



**Faculty or Teaching Staff:** Dr. Mohamed Sherif (Male section)

Mrs.Savita Singh(Female section)

**Signature:** \_\_\_\_\_ **Date Report Completed:**

**Course Coordinator:** Dr. Mohamed Sherif

**Signature:** \_\_\_\_\_

**Received by:** Dr. Fuzail Ahmad

**Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**RHPT484**  
**Advanced Physical Therapy procedures**  
**Section no: 923**



## Course Specifications

Institution: <b>Majmaah University</b>	Date of Report: 4.3.2015G
College/Department: <b>College of applied Medical Sciences / Dept. Of Physical &amp; Health rehabilitation</b>	

### A. Course Identification and General Information

1. Course title and code: <b>ADVANCED PHYSICAL THERAPY PROCEDURES - RHPT 484</b>			
2. Credit hours: <b>3 hours</b> (1 Theory & 2 Practical)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course: Dr.Intasar Wakeed, <b>Mr. Radhakrishnan</b> Section no: 923 & <b>Mr. Walaa</b> (section no: 933,1641)			
5. Level/year at which this course is offered : 8 <sup>th</sup> Level			
6. Pre-requisites for this course (if any) RHPT 354			
7. Co-requisites for this course (if any) NA			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="na"/>	What percentage?	<input type="text" value="na"/>
c. e-learning	<input type="text" value="na"/>	What percentage?	<input type="text" value="na"/>
d. Correspondence	<input type="text" value="na"/>	What percentage?	<input type="text" value="na"/>
f. Other	<input type="text" value="na"/>	What percentage?	<input type="text" value="na"/>
Comments:			

## B Objectives

1. What is the main purpose for this course? This course introduces the students to the knowledge about the advanced Physical Therapy Skills in various specialities required to render an expertise treatment.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
1. The Lectures should also be a part of updating their knowledge through continuous medical education (CME), periodically in rotational basis.
2. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)
3. Students will be encouraged to do the following:
a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

The course introduces the students to the specialized Physical Therapy skills in various specialities. It also helps to update the technical skills required to render an expertise treatment. The course enables the students to understand and plan the Physical therapy treatment protocol with advanced treatment methods

CONTENTS OF THE COURSE		
Topics	No. of Weeks	Contact hours
<b>Swiss Ball Exercises</b> <ul style="list-style-type: none"> <li>History.</li> <li>Methods of selections.</li> <li>Preparations and Precautions</li> <li>Application techniques</li> </ul>	Week1	05
<b>Core Stability Training</b> <ul style="list-style-type: none"> <li>Structure of core muscles.</li> <li>Assessment of core muscles.</li> <li>Core stability training.</li> </ul>	Week 2	05
<b>Constrained Induced Movement Therapy (CIMT)</b> <ul style="list-style-type: none"> <li>Neurophysiology of CIMT.</li> <li>Treatment components.</li> <li>Therapeutic effects and procedures.</li> <li>Treatment protocols</li> <li>Advantage and disadvantage of CIMT</li> </ul>	Week 3	05

<b>Tapping techniques:</b> <b>General tapping techniques:</b> <ul style="list-style-type: none"> <li>• Tapping materials</li> <li>• Tapping preparation</li> <li>• Treatment steps</li> </ul> <b>K-tapping</b> <ul style="list-style-type: none"> <li>• Basic functions and effects of K-tapping</li> <li>• Tapping procedures for common musculoskeletal conditions</li> </ul>	Week 4 & 5	10
<b>In course examination 1(Mid Term Exam – Theory &amp; Practical)</b>	Week 6	
<b>Proprioceptive Neuromuscular Facilitation (PNF)</b> <ul style="list-style-type: none"> <li>• Basic principles to PNF</li> <li>• Patterns of movement</li> <li>• Specialized Techniques of PNF.</li> </ul>	Week 7, 8	10
<b>Neural mobilization</b> <ul style="list-style-type: none"> <li>• Basic principles of neural mobilization.</li> <li>• Clinical Neurobimechanics.</li> <li>• Neural Tension testing.</li> <li>• Palpation of peripheral nerves.</li> <li>• Self-treatment techniques.</li> </ul>	Week 9& 10	10
<b>Mckenzie approach for mechanical low back pain</b> <ul style="list-style-type: none"> <li>• Long term goals.</li> <li>• Mckenzie method of assessment.</li> <li>• Mechanical diagnosis and therapy system.</li> <li>• Prevention strategies for back problems</li> </ul>	Week 11	05
<b>In course examination 2(Mid Term Exam – Theory)</b>	Week12	
<b>Agility and Plyometric training</b> <ul style="list-style-type: none"> <li>• Introduction and technical aspects of agility training</li> <li>• Agility equipment and training drills</li> <li>• Agility designs.</li> <li>• Physiology of plyometric exercise</li> <li>• Plyometric program design</li> <li>• Plyometric training equipment</li> <li>• Plyometrics and safety considerations</li> </ul>	Week13	10
<b>Student presentations</b>	Week14	05
<b>Final Practical examination</b>	Week15	
<b>Final Theory examination</b>	Week16	

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	15	NA	NA	60	NA	75
Credit	1	NA	NA	2	NA	3

3. Additional private study/learning hours expected for students per week.

NA

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has **should not exceed eight learning outcomes** which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A3.1	<b>Recall</b> the scientific concepts and Principles associated with current skilled Exercise interventions	Classroom lectures with books and web-enhanced materials.	Written Exams (Mcq ,Saq,Casestudy & Quiz
<b>B</b>	<b>Cognitive Skills</b>		
B3.1	<b>Develop</b> a problem based approach in evaluation of effectiveness of various Advanced Physical Therapy interventions..	Lectures, Multimedia simulations of challenging and key concepts	Written Exams & Mcq ,Saq,Casestudy & Quiz
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
C2.1.	<b>Demonstrate</b> the most suitable treatment methods for the patients and teach them the safety precautions to be followed.	Lectures, practical Demos, students discussions.	Written Exams & Practical Exams
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
D2.1	The student will be able to display the ability to use the latest technology to collect information about the Advanced Physical therapy Techniques from reliable sources	Face to face meetings, streaming audio explanations. Classroom presentations.	Assignments, Topic Presentation using Rubrics
<b>E</b>	<b>Psychomotor</b>		
E1.1	<b>Perform</b> various advanced Physical therapy treatment interventions techniques by following the specific procedures for evaluation and treatment administration	Live demonstrations and interactive video demonstrations	Practical Exams using Rubrics

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write



<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First midterm theoretical exam.	6	10%
2	First midterm practical exam.	6	10%
3	Second midterm theoretical exam.	12	10%
4	Second midterm practical exam.	12	10%
5	Quizzes	3 & 9	10%
6	Student presentations with Assignment	14	10%
7	Final theoretical exam.	15	30%
8	Final practical exam.	16	10%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

**Students are requested to consult the respective faculty member during their office hours specified in the semester schedule**  
**Monday 1-2 pm**

#### E. Learning Resources

1. List Required Textbooks

**Mohammad W S, Radhakrishnan, El-Sayed WM. (2014), "Specialized Physical Therapy Techniques". Lambert academic publishing.**

2. List Essential References Materials (Journals, Reports, etc.)

<http://www.massageclinic.com.au/service/muscle-energy-technique/>

<http://arunpathak.wordpress.com/2011/12/03/the-physiology-and-application-of-muscle-energy-techniques/>

<http://muscleenergytechniques.blogspot.com/>

<http://muscleenergytechniques.blogspot.com/2013/01/chapter-4-sequential-assessment-and-met.html>

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- **BRUKNER AND KHAN (2006), CLINICAL SPORTS MEDICINE 3E, McGRAW-HILL Clinical sports medicine.**
- **Butler DS. (1994), "Mobilization of nervous system", Churchill Livingstone.**
- **RATAMESS N. (2012), "ACSM's Foundations of Strength Training and Conditioning", Lippincott Williams & Wilkins.**
- **Kumbrink B. (2012) "K Taping, an illustrated guide: basic, techniques and indications", Springer.**

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.



## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) 1. Lecture room suitable for 25 students provided with smart board Lab for practical sessions.
2. Computing resources (AV, data show, Smart Board, software, etc.)
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching  a. Asking question before, during and after each lecture b. Provision of appraisal form to the students & to rectify changes if any – done through HOD consent c. Through evaluation of the course by student at their web site
<b>2. Other Strategies for Evaluation of Teaching by the Program/Department Instructor :</b> Frequent feedback from the students & clarification of doubts now & then feedback from the students oral or written about the lecture by the supervisor or HOD of the department & later to discuss the issues if any with the concerned staff.
<b>3 Processes for Improvement of Teaching :</b> a. Attending frequent workshops in Saudi Arabia for update of latest trends in the field of physical therapy b. Efficient & effective use of teaching methods (RUBRICS and other related form of teaching methods) c. Planning to make online student based training d. Planning to make tutorial by webinars

Easy & illustrative examples
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <p>-Peer review of lectures and course work - Verification of Exam and Marks done by other Teachers.</p>
<p><b>5. Describe the planning arrangements for periodically reviewing course Effectiveness and planning for improvement :</b></p> <p>a. Continuous evaluation of the students during the term, and frequent updating of the course content.</p> <p>b. Planning to make exams online</p> <p>c. Planning to conduct online surveys</p>

**Course coordinator: Dr.Intasar.**

**Faculty or Teaching Staff:**

Mr. U. Radhakrishnan -----

Mr. Walaa Sayeed-----

**Signature:**

**Date of Report Completed:**

**Received by:**

**Department Head -----**

**Date:-----**

**Signature: \_\_\_\_\_**

**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**READING IN MEDICAL IMAGING**

**RHPT 485**

**2<sup>nd</sup> SEMESTER 1435-1436**

## Course Specifications

Institution- <b>MAJMAAH UNIVERSITY</b>	Date of Report-19/ 04/ 1436H
College/Department - <b>COLLEGE OF APPLIED MEDICAL SCIENCES</b> <b>DEPARTMENT OF PHYSICAL THERAPY &amp; HEALTH REHABILITATION</b>	

### A. Course Identification and General Information

1. Course title and code:— <b>READING IN MEDICAL IMAGING, RHPT 485</b>			
2. Credit hours – <b>3(2+1+0)</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>PHYSICAL THERAPY PROGRAM</b>			
4. Name of faculty member responsible for the course Course Coordinator: <b>Dr.Mohamed Ateef (Section: 1549 / 1550)</b> Course Instructor : <b>Mr.Prashant.P.Kashyap (Section: 925 / 926)</b> <b>: Mrs.Rashmi.A.Saibannavar (Section: 177 / 178 / 184 )</b>			
5. Level/year at which this course is offered - <b>Level 8/ 4<sup>th</sup> Year</b>			
6. Pre-requisites for this course (if any): <b>NA</b>			
7. Co-requisites for this course (if any): <b>NA</b>			
8. Location if not on main campus <b>NA</b>			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

<p>1. What is the main purpose for this course?</p> <p>This course will emphasize on understanding the diagnostic imaging emphasizing on simple X-rays, some advanced techniques &amp; correlating with the patient's condition. To build a good understanding of different imaging modalities and procedures used by health providers to make right decision about different abnormalities : (Musculoskeletal, Cardiothoracic, Respiratory &amp; Neurological)</p> <ul style="list-style-type: none"> <li>• Improve the assessment and communication skills with different health providers.</li> <li>• Promote the spirit of team work.</li> <li>• Build good treatment plan depending of sound diagnosis.</li> <li>• Promote professional behaviours and conducts.</li> </ul>
<p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <ol style="list-style-type: none"> <li>1. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)</li> <li>2. Students will be encouraged to do the following: <ol style="list-style-type: none"> <li>a. Acquiring knowledge through the Internet, journals and verifying the other information resources.</li> <li>b. Sharing the acquired knowledge with critical/lateral thinking &amp; clinical reasoning.</li> </ol> </li> </ol> <p>Conduct field visits to electrotherapy department in hospitals.</p>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

Exercise Physiology is a field of study investigates (from systemic to sub-cellular level) the acute responses and chronic adaptations of physiological functions to a wide-range of physical exercise conditions, involving people of all ages (children to elderly) and abilities (diseased, healthy and athlete).

1. Topics to be covered		
List of Topics	No. of Weeks	Contact Hours
<b>Introduction</b> History Types of imaging modalities	1 week	2
<b>X Ray – normal reading &amp; Anatomy basics.</b> <ul style="list-style-type: none"> <li>• Musculoskeletal</li> <li>• Chest</li> </ul> Practical demo on certain X-rays – Basics	2 & 3	4

<b>Abnormal - X-Ray-</b> Musculoskeletal conditions <ul style="list-style-type: none"> <li>Cervical, thoracic-lumbar, shoulder, Arms, forearm and wrist, Hip, Thigh, Knee, Lower leg, Ankle &amp; foot</li> </ul> Practical demo on certain X-rays – Basics	4 & 5	4
<b>Abnormal -X-Ray-</b> Cardiorespiratory conditions	6	2
<b>First Mid Term</b>	7	2
<b>Magnetic Resonance Imaging (MRI)</b> Brain, Spine, Limb and joints abnormalities & practical demo	8 & 9	4
<b>Computerized Tomography CT</b> Skull, Spine, Limb and joints Practical demo on certain CTS – Basics	10 & 11	4
<b>Second Mid Term</b>	12	2
<b>Ultrasound / Ultrasonography</b>	13	2
<b>Angiogram / Fluoroscopy</b>	14	2
<b>Final Practical</b>	15	
<b>Final Theory</b>	16	

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30			30		60
Credit	2			1		3

3. Additional private study/learning hours expected for students per week.

5 hrs/Week

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more**

of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.1	Knowledge		
a1.1	Describe the different types of imaging modalities related to Physical Therapy	Lecture, Lecture -demonstration & class discussion by teacher, open text book study, homework & practice, summarizing & note taking, daily re-looping of previously learned material	M.C.Q & S.A.Q
a1.2	Outline the radiological findings of the normal anatomical structures.		
a1.3	Label findings of different pathologies in musculo-skeletal, neurological and cardio-pulmonary systems.		
2.1	Cognitive Skills		
b1.1	Interpretation of normal anatomical structures from different views concerning spine, extremities, brain, heart and chest.	Case method, use of motion pictures, educational films, pod cats & video tapes	Scenario based question, Case study question
b1.2	Comparison of musculoskeletal, neurological or cardio-pulmonary radiological deviations from normal.		
b1.3	Justify the correlation between radiological and clinical findings.		
3.0	Interpersonal Skills & Responsibility		
	NA		

4.0	Communication, Information Technology, Numerical		
	NA		
5.0	Psychomotor		
5.1	NA		

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

#### Suggested assessment methods and teaching strategies are:

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.



5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam – Theory	6	15%
2	First Midterm exam – Practical	7	10%
3	Second Midterm exam – Theory	11	15%
4	Second Midterm exam – Practical	12	10%
5	Logbook	13	10%
6	Final exam – Practical	15	10%
7	Final exam – Theory	16	30%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Day	Dr.Mohamed Ateef	Mr. Prashant P. Kashyap	Mrs.Rashmi.A.Saibannavar
Sunday		9:00 am – 11:00 am	12.30- 1.30
Monday			
Tuesday		10:00 am – 12:00 noon	8:00 am – 10:00 am
Wednesday			
Thursday		8:00 am – 10:00 am	12.30- 1.30

#### E. Learning Resources

1. List Required Textbooks
❖ <b>Clinical Radiology Made ridiculously simple, 3rd edition, 2002. Hugue Ouellette, M.D. Patrice Tetreault, M.D.</b>
2. List Essential References Materials (Journals, Reports, etc.)
❖ <b>Scope of Diagnostic Imaging, 2011, Michael Y. M. Chen, MD, Christopher T. Whitlow MD, PhD</b>
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)
1. <a href="http://www.apta.org">www.apta.org</a>
2. <a href="http://www.physio-med.com">www.physio-med.com</a>
3. <a href="http://www.medsourceusa.com">www.medsourceusa.com</a>
4. <a href="http://www.books.google.co.in">www.books.google.co.in</a>
5. <a href="http://www.amazon.co.uk">www.amazon.co.uk</a>
6. <a href="http://www.en.wikipedia.org/wiki">www.en.wikipedia.org/wiki</a>
7. <a href="http://www.wcpt.org">www.wcpt.org</a>
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
1. <b>Lecture room suitable for 25 students provided with smart board</b>
2. <b>Lab for practical sessions</b>
2. Computing resources (AV, data show, Smart Board, software, etc.)
❖ <b>Internet in lecture hall and lab</b>
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
a) <b>Asking question before, during and after each lecture</b>
b) <b>Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</b>
c) <b>Through evaluation of the course by student at their web site</b>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
a. <b>Frequent feedback from the students &amp; clarification of doubts now &amp; then</b>
b. <b>feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff.</b>
3 Processes for Improvement of Teaching
a) <b>Attending frequent workshops in Saudi Arabia for update of latest trends in the field of physical therapy</b>
b) <b>Efficient &amp; effective use of teaching methods (RUBRICS and other related form of teaching methods)</b>
c) <b>Planning to make assignments &amp; tutorial by webinars</b>
d) <b>Easy &amp; illustrative examples</b>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

<p>a) Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</p> <p>b) Matrix – Mapping</p> <p>c) Peer review / department council committee review</p>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <p>a. Continuous evaluation of the students during the term, and frequent updating of the course content.</p>

**Faculty or Teaching Staff: Dr.Mohamed Ateef, Mr.Prashant.P.Kashyap (Male Section)**  
**: Mrs.Rashmi.A.Saibannavar (Female Section)**

**Signature:** \_\_\_\_\_ **Date Report Completed:** 19/ 04/ 1436H

**Course Coordinator: Dr.Mohamed Ateef** **Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad** **Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**Kingdom of Saudi Arabia**  
**The National Commission for Academic Accreditation & Assessment**

**Course Specifications**  
**(CS)**  
**RHPT 491**  
**Second semester 1435-1436**

## Course Specifications

Institution	<b>Majmaah University</b>	Date of Report: <b>5-4-2015 (2<sup>nd</sup> Semester -1435-1436)</b>
College/Department : <b>College of Applied Medical Sciences / Department of Physical Therapy &amp; Health Rehabilitation</b>		

### A. Course Identification and General Information

Course title and code: <b>Management in Physical Therapy Services/ RHPT 491</b>			
2. Credit hours: <b>2 Credit (2+0+0)</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Bachelor of Physical Therapy and Health Rehabilitation</b>			
4. Name of faculty member responsible for the course <b>Course Coordinator : Dr: Intsar Salim Abd El-Aziz Waked (Section: 187)</b> <b>Course Instructors 1.Mr. Walaa Mohamed EL-Sayed (Section: 935)</b>			
5. Level/year at which this course is offered: <b>Level – 9 / 4<sup>rd</sup> Year</b>			
6. Pre-requisites for this course (if any): <b>RHPT 472 – RHPT 475.</b>			
7. Co-requisites for this course (if any): <b>NA</b>			
8. Location if not on main campus: <b>NA</b>			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>

## B Objectives

1 Summary of the main learning outcomes for students enrolled in the course.

**The students would acquire the following as outcomes of the course:**

1. Learn managerial skills
2. Recognize role of manager
3. Analyze interrelation between different levels of administration
4. Acquire knowledge to be a successful leader
5. Judge ethical and moral principles
6. Demonstrate code of ethics in physical therapy practice.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

1. **The Lectures should also be a part of updating their knowledge through continuous medical education (CME), periodically in rotational basis.**
2. **The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc..)**
3. **Students will be encouraged to do the following:**
  - a. **Acquiring knowledge through the Internet, journals and verifying the other information resources.**
  - b. **Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.**

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

The course is an introduction to the administration of hospitals and physiotherapy services. Topics covered include: departmental design, record, procedure manuals, scheduling of patients, recruiting, supervising and evaluating staff. The course also touches on the ethics of physical therapy and professional leadership.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
<b>MANAGEMENT IN HEALTH CARE</b>		
TRANSITIONING FROM PATIENT CARE TO MANAGEMENT	02	04
<b>HEALTH-CARE ORGANIZATIONS AND PHYSICAL THERAPY</b>		
ORGANIZATIONAL CULTURE	01	02
<b>EFFECTS OF SOCIALIZATION</b>		
A STRATEGY FOR UNDERSTANDING ORGANIZATIONS	01	02
<b>LEADERSHIP</b>		
	02	04
<b>Midterm (1)</b>		
<b>RESPONSIBILITIES OF THE PHYSICAL THERAPY MANAGER</b>		
POLICY AND PROCEDURES MANUAL	01	02
<b>RESPONSIBILITIES OF THE PHYSICAL THERAPY MANAGER</b>		
VISION, MISSION, AND OBJECTIVE IN THE ORGANIZATION	01	02
<b>OVERVIEW OF OUTPATIENT PHYSICAL THERAPY</b>	02	04
<b>Midterm (2)</b>		
<b>RISK FACTORS FACING MANAGEMENT IN PT DEPARTMENT</b>		
	02	04
<b>INTERNATIONAL CODE OF ETHICS FOR THE PHYSICAL THERAPIST</b>	01	02

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30					30
Credit	2					2

3. Additional private study/learning hours expected for students per week.	2 hrs
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
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Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A.1.3	<b>A.1.3.1 Recognize</b> different principles of management utilized in physical therapy department and profession (Human resource, financial, patient load, policies and procedures, Vertical and horizontal relationship)	Lecture, Lecture - demonstration & class discussion by teacher, Text book assignments, open text book study, homework, summarizing & note taking, daily re-looping of previously learned material	M.C.Q & S.A.Q
<b>B</b>	<b>Cognitive Skills</b>		
B.2.1	B.2.1.1. <b>Compare</b> the qualifications of health-care managers with prior clinical experience to those with academic degrees in management and no clinical experience.	Case presentation, use of Video presentation	MCQ SAQ Case presentation Scenario based discussion
	B.2.1.2. <b>Justify</b> the role of mentoring physical		



	therapists as they transition from clinical to managerial roles		
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
C.3.1	C.3.1.1. <b>Demonstrate</b> professional leadership and managerial role in socialization and group dynamic	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Case presentation  Group discussion
	C.3.1.2. <b>Analyse</b> risk factors which may be Hazardous situations and may face the organization		
C.3.2	C.3.2.1 <b>illustrate</b> patient consent, confidentiality, and rights, the role of managers in addressing the legal duties of organizations		case presentation
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
D.4.1	D.4.1.1. <b>Demonstrate</b> communication skills with colleagues verbally	Recitation, debate, use of technology & instructional resources, faculty website, e-mail.	Case presentation
D.4.2	D.4.2.1. <b>Use</b> media and technology to gather information, record observations and plan legibly, efficiently, and accurately in written or electronic form		Group discussion

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble,

	experiment, and reconstruct
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Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

**5. Schedule of Assessment Tasks for Students During the Semester**

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quizzes	4, 10	10%
2	First Midterm exam	6	20%
3	Second Midterm exam	12	20%
4	presentation	Throughout the course	10%
5	Final exam	16	40%

**D. Student Academic Counseling and Support**

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Day	Dr. Intsar	Mr. Walaa
Sunday		8-10
Monday	10-12	8-10
Tuesday	8-10	
Wednesday		

Thursday		
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### E. Learning Resources

List Required Textbooks Catherine G.Page. Management in Physical therapy practices.(2010), F.A.Davis, New Yourk
2. List Essential References Materials (Journals, Reports, etc.) c. <a href="http://www.apta.org">www.apta.org</a> d. <a href="http://www.physio-med.com">www.physio-med.com</a> e. <a href="http://www.medsorceusa.com">www.medsorceusa.com</a> f. <a href="http://www.books.google.co.in">www.books.google.co.in</a> g <a href="http://www.wcpt.org">www.wcpt.org</a>
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.) a <a href="http://www.Managementpt.com">www.Managementpt.com</a>
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Lecture room suitable for 25 students.
2. Computing resources (AV, data show, Smart Board, software, etc.) One computer in the classroom, Projector. (In classroom) Smart board. (In classroom) Data show. (In classroom)
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

### G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching a. Asking question before, during and after each lecture b. Provision of appraisal form to the students & to rectify changes if any – done through HOD consent c. Through evaluation of the course by student at their web site
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor a. Frequent feedback from the students & clarification of doubts now & then Feedback from the students oral or written about the lecture by the supervisor or HOD of the department & later to discuss the issues if any with the concerned staff.

3 Processes for Improvement of Teaching a. Attending frequent workshops b. Efficient & effective use of teaching methods c. Easy & illustrative examples
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) a. Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field. b. Matrix – Mapping c. Peer review / department council committee review
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. a. Continuous evaluation of the students during the term, and frequent updating of the course content.

**Faculty or Teaching Staff: 1. Dr. Intsar Salim Waked (Girls section)**  
**2. Mr. Walaa Mohamed (Male section)**

**Signature:1.** \_\_\_\_\_

**Signature:2.** \_\_\_\_\_ **Date Report Completed: 05 -04-1436**

**Received by:** \_\_\_\_\_ **Dean/Department Head: Dr. Fuzail Ahmad**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**RHPT-492  
OCCUPATIONAL THERAPY  
SECTION NO: 936/ 1552**

## Course Specifications

Institution: : <b>MAJMAAH UNIVERSITY</b>	Date of Report:
College/Department : <b>COLLEGE OF APPLIED MEDICAL SCIENCES</b>	

### A. Course Identification and General Information

1. Course title and code: <b>OCCUPATION THERAPY, RHPT 492</b>			
2. Credit hours: <b>3( 2+1+0 )</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course Course Coordinator : <b>Savita Singh (Section )</b> Course Instructor <b>Mr. U. Radhakrishnan 936/ 1552</b>			
5. Level/year at which this course is offered: <b>9<sup>th</sup> Level</b>			
6. Pre-requisites for this course (if any): <b>NA</b>			
7. Co-requisites for this course (if any) no pre-requisites are required			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

### 1. What is the main purpose for this course?

**Upon the completion of this course, students should have a clear understanding of the followings:**

The course describes the theoretical basis of occupational therapy and the therapeutic activities needed for the application of occupational therapy treatment. It also guides the students to apply the occupational therapy principles and skills in their physical therapy practice.

### 2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

1. The usage of web based assistance to develop some innovative assisting devices for patients.
2. The usage of IT in exploring the opportunities for occupation to various disabled.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

The course aims at applying the principles of and therapeutic skills of occupational therapy. Students are acquainted with the commonalities between physical therapy and occupational therapy in order to identify types of patients who are in need of occupational therapy

List of Topics		
1. Introduction to Occupational Therapy, conceptual foundation for practice & process of occupational Therapy.	No. of Weeks	Contact Hours
2. Assessment of Occupational function, assessing abilities and capacities of various functions.	1	2 Hours
3. Occupational Therapy Planning, Guiding and documenting practice	1	2 Hours
4. Occupation as therapy selection, gradation, Analysis and adaptation.	1	2 Hours
5. Description of Activities of Daily Living (Basic & Instrumental) pertaining to Occupational Therapy practice.	1	2 Hours
6. Optimizing Abilities and Capacities: Biomechanical Approach to treatment.	1	2 Hours
7. Wheel chairs, types and occupational therapy assessment.	2	4 Hours
8. Occupational therapy treatment principles& methods for common Orthopedic conditions treated by Physical Therapists.	2	4 Hours
9. Occupational therapy treatment principles& methods for Neurological conditions treated by Physical Therapists	2	4 Hours

10. Occupational therapy treatment principles& methods for Hand impairments	1	2 Hours
11. Ergonomics and its intervention with relation to occupation and Industrial Rehabilitation.	1	2 Hours

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30 hours	NA	NA	30 hours	NA	60 hours
Credit	2	NA	NA	1	NA	3 credits

3. Additional private study/learning hours expected for students per week.	2
4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy	

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A2.1.	The student will be able to <b>describe</b> the fundamental concepts of Assessment and treatment models of occupational therapy	Lectures, class discussion by teacher, open text book study, homework & practice, Summarizing & note taking, daily re-looping of previously learned material.	Written Exams using - (MCQ, SAQ) & Quiz (Oral) – using RUBRICS
A2.2.	The student will be able to <b>define</b> ergonomics and describe the role of occupational therapist in ergonomics.		
A2.3	The student will be able to <b>state</b> the types and Functions of Mobility aids and describe the various types of Wheelchairs.		
<b>B</b>	<b>Cognitive Skills</b>		
B2.1	The student will be able to <b>justify</b> the principles underlying the evaluation techniques employed in Occupational therapy	Lectures, Case presentation method, educational films,	Written Exams using - (MCQ, SAQ, Case Study) & Quiz (Oral) – using RUBRICS
B2.2.	The student will be able to <b>explain</b> the principles of constructing plan of treatment and analyze the setting goals taking into account relevant contextual factors.		
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
C1.1	The student will be able to <b>demonstrate</b> the role of Occupational therapist in Rehabilitation team and choose various treatment options for patients to achieve the functional outcomes.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, Practical demonstrations.	Practical Exam using Rubrics.
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
D1.1.	<b>The student will be able to evaluate</b> the changes that result from occupational therapy including physiological, structural, behavioral and functional changes in different individuals and communities	Recitation, debate, use of technology & instructional resources, faculty website, e-mail	Logbooks, Assignments using Rubrics.
<b>E</b>	<b>Psychomotor</b>		
E1.1.	The student will be able to <b>demonstrate</b> various Occupational therapy Assessment and treatment methods.	Teacher demonstration, Nonlinguistic representation (Physical models, Role playing, Hands on, active participation	Practical exam –Using RUBRICS

### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

S.n	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Theory Exam – First Internals	6 <sup>th</sup>	20
2	Practical Exam – First Internals	6 <sup>th</sup>	5
3	Theory Exam – Second Internals	12 <sup>th</sup>	20
4	Practical Exam – Second Internals	12 <sup>th</sup>	5
5	Assignments	11 <sup>th</sup>	5
6	Written Quiz	5 <sup>th</sup>	5
7	Final Theory examination	16 <sup>th</sup>	30
8	Final Practical examination	16 <sup>th</sup>	10

## D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)  
Tuesday-10-12 [2hrs]

## E. Learning Resources

1. List Required Textbooks
  - Occupational Therapy for Physical Dysfunction
  - Mary Vining Radomski MA OTR FAOTA (Editor), Catherine A. Trombly ScD OTR FAOTA (Editor)  
Publication Date: March 1, 2007 | ISBN-10: 0781763126 | ISBN-13: 978-0781763127 |  
Edition: Sixth, Publisher: Lippincott Williams & Wilkins
2. List Essential References Materials (Journals, Reports, etc.)
  - Occupational Therapy Interventions: Function and Occupations,
  - Catherine Meriano JD OTR/L (Author), Donna Latella EdD OTR/L (Author)  
Publication Date: September 15, 2007 | ISBN-10: 1556427328 | ISBN-13: 978-1556427329 |  
Edition: 1<sup>st</sup>, Publisher: Slack Incorporated; 1st edition (September 15, 2007)
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)  
Occupational Therapy: Practice Skills for Physical Dysfunction, by Lorraine Williams Pedretti (Author, Editor). Publisher: Mosby-Year Book; 4th edition (January 15, 1996),  
ISBN-10: 0815168128, ISBN-13: 978-0815168126
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)  
AOTA ( American Occupational Therapy Association)  
[www.aota.org](http://www.aota.org)
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.  
**CD-** Occupational Therapy for Physical Dysfunction  
Mary Vining Radomski MA OTR FAOTA (Editor), Catherine A. Trombly ScD OTR FAOTA

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
  - ❖ Large class rooms : 30 students
  - ❖ Small class rooms: 15 students
  - ❖ Laboratories: 15 students

<p>2. Computing resources (AV, data show, Smart Board, software, etc.) <b>Smart board available in all class rooms</b></p>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) <b>Occupational therapy Laboratory should be established.</b></p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <b>Web based Questionnaires given to students.</b></p>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor <b>Surprise tests and general competitive exams and quizzes</b></p>
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> <li>➤ <b>Adaptation to the recent Teaching methodologies, Analyzing the strength and weakness of the self-teaching methods from the student evaluation and peer group evaluation.</b></li> <li>➤ <b>Attending frequent workshops.</b></li> <li>➤ <b>Conducting In house Seminars.</b></li> </ul>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) <b>The students with academic excellence can be selected and should be allowed to interact and compete with other universities of the kingdom by a common competency exam.</b></p>

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

**The curriculum committee formed in the college constantly review and evaluate the contents of the courses by comparing it with National and International bench marks and constantly planning is done according to the need of the community.**

**Faculty or Teaching Staff: Mr. Radhakrishnan ( Male Section)  
Mrs. Savita Singh (Girls Section)**

**Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_**

**Course Coordinator: Savita Singh Signature: \_\_\_\_\_**

**Received by: Dr. Fuzail Ahmad ,Department Head.**

**Signature: \_\_\_\_\_ Date: \_\_\_\_\_**



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**CLINICAL PRACTICE  
RHPT-493**

**Course Specifications  
(CS)**

## Course Specifications

Institution	<b>Majmaah University</b>	Date of Report
College/Department :	<b>Department of Physical Therapy &amp; Health Rehabilitation</b>	

### A. Course Identification and General Information

1. Course title and code: <b>Clinical Practice , RHPT-493</b>			
2. Credit hours <b>(2+0+0) 2 hours</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>ENGLISH</b>			
4. Name of faculty member responsible for the course Course Coordinator : <b>Dr. Mahamed Ateef ( Male Section )</b> (Section:938) Course Instructors 1. <b>Mrs. Rashmi.A.Saibannavar ( Female Section )</b> (Section: 192 )			
5. Level/year at which this course is offered <b>Level– 9 / 4<sup>rd</sup> Year</b>			
6. Pre-requisites for this course (if any) <b>NA</b>			
7. Co-requisites for this course (if any) <b>NA</b>			
8. Location if not on main campus <b>NA</b>			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			



## B Objectives

<p>1. What is the main purpose for this course?</p> <p>After successfully completing this course student should be able to:</p> <p>Develop physiotherapy competencies in a range of contexts/settings, with students managing clients across the lifespan. This will consist of pre-immersion coursework in the areas of physiotherapy practice; cardiorespiratory, musculoskeletal and neurology, completing simple and complex cases.</p>
<p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <p>This course prepares the future physical therapist to interact with patients, patient's families, and other related individuals on all levels. To accomplish this students will participate in direct patient care in a variety of settings with supervision by a volunteer adjunct clinical faculty member. This course is the culmination of the clinical education experiences for Physical Therapy Graduate students.</p>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
<p><b>1. Introduction to Clinical practice-Apply the principles of interviewing skills to history taking</b></p> <ul style="list-style-type: none"> <li>➤ Use of clinical tools,</li> <li>➤ Assessment scales, tests and charts</li> <li>➤ Clinical log book use</li> </ul>	Week 1	04
<p><b>2. Pediatric Orthopedic cases.</b></p> <ul style="list-style-type: none"> <li>➤ Orthopedic Surgical Interventions for Cerebral Palsy</li> <li>➤ Conservative&amp; Surgical management of fractures in Pediatrics.</li> <li>➤ Regional Pediatric Orthopedic cases Ex: CTEV, CDH, Legg–Calve´–Perthes Disease etc .- case studies</li> </ul>	Week 2	08
<p><b>3. Pediatric Neurological cases</b></p> <ul style="list-style-type: none"> <li>➤ Cerebral Palsy, Down syndrome</li> <li>➤ Brachial plexus injury</li> <li>➤ Muscular dystrophies</li> <li>➤ <b>Other Pediatric Neurological cases requiring Physical therapy</b></li> </ul>	Week 3&4	08

<b>4. Pediatric Cardio respiratory cases</b> <ul style="list-style-type: none"> <li>➤ Cardiothoracic Surgery -<b>Congenital Heart Diseases and Management</b> – Intensive Care Unit.</li> <li>➤ Pediatric Respiratory Care – Intensive Care Unit.</li> </ul>	Week -5	04
<b>In course examination 1<sup>st</sup> Mid Term Exam – Practical)</b>	Week 6	
<b>5. Methods to design the plan of care that integrates goals, treatments, outcomes and discharge plan.</b> <ul style="list-style-type: none"> <li>➤ <b>Assessment of Cardiovascular disorders/cases</b></li> <li>➤ <b>Clinical Tests and Measurements</b> <ul style="list-style-type: none"> <li>Electrocardiogram</li> <li>Echocardiogram</li> <li>Exercise Tolerance Test</li> </ul> </li> <li>➤ <b>Cardiac Rehabilitation</b> <ul style="list-style-type: none"> <li>1- Definition and concept of cardiac rehab.</li> <li>2- Significant and Goals of cardiac rehab.</li> <li>3- Phases of cardiac rehabilitation.</li> </ul> </li> </ul>	Week 7	08
<b>6. PT for Chronic Obstructive Pulmonary Disorders/cases (COPD) &amp;</b>  <b>PT for Restrictive Pulmonary Disorders/cases:</b>	Week 8	08
<b>7 A. Exercise Prescription( Karvonen's Formula)</b> Home Exercise Program <b>B. Monitoring and Life Support Equipment in Intensive care Unit</b> <ul style="list-style-type: none"> <li>➤ Non Invasive and</li> <li>➤ Invasive Monitoring Equipment's,</li> <li>➤ Oxygen Delivery Devices, Chest Tube, and</li> <li>➤ Life Support Equipment</li> </ul>	Week 9	04
<b>8. Clinical Decision making in Physical Therapy</b> <ul style="list-style-type: none"> <li>➤ Examine the patient</li> <li>➤ Evaluate the data and identify the problems</li> <li>➤ Determine the Diagnosis</li> <li>➤ Implement the plan care</li> <li>➤ Determine the prognosis and change of plan of care</li> </ul>	Week-10	04
<b>9. Evidence Based Practice- Physical Therapy Database Search &amp; Interpretation of RCT's relevant to case studies.</b>	Week-11	04



<b>In course examination I1 Mid Term Exam – Clinical Evaluation)</b>	Week 12	
<b>7. Independent Assessment &amp; Evaluation &amp; Management of patients under semi supervision of clinical instructor.</b>	Week 13	<b>04</b>
<b>8. Group Case discussion</b> ➤ Discussion and presentation of the case or project ➤ Evaluation of document: number of cases seen in clinical practice	Week 14	04
<b>Final Clinical examination [Summative Evaluation]</b>	Week 15	

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours				<b>60</b>		<b>60</b>
Credit				<b>2</b>		<b>2</b>

3. Additional private study/learning hours expected for students per week.	<input type="text"/>
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
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Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment



methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	<b>NQF Learning Domains And Course Learning Outcomes</b>	<b>Course Teaching Strategies</b>	<b>Course Assessment Methods</b>
<b>a.0</b>	<b>Knowledge</b>		
a.3	a.3.1 – The student will be able to Reproduce the assessment, investigative procedures, & appropriate interventions based on outcome measures of Pediatric- orthopedics, Neurology cardiopulmonary conditions./ adult Cardiopulmonary diseases	Discussion by teacher, Textbook assignments, homework & practice.	Topic presentations, Assignments/Logbook, viva voce – using RUBRICS
<b>b.0</b>	<b>Cognitive Skills</b>		
b.3	b.3.1 - Develop an effective and safe evidence-based physiotherapy intervention plan that is appropriate for the individual and prioritized in order to address assessment findings, while aiming to achieve the individual's treatment goals.	Case method, use of motion pictures	Topic presentations, Assignments/Logbook, viva voce – using RUBRICS
<b>c.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
c.2	c.2.1 - Demonstrate an understanding of the presentation and management of a wide range of paediatric and adult problems while being respectful and sensitive to individual client needs.	Peer sharing, & cooperative groups.	Clinical case presentation, Viva voce – Using Rubrics
<b>d.0</b>	<b>Communication, Information Technology, Numerical</b>		
d.2	d.2.1 - Appraise an evidence-based approach, research and references to acquire a new knowledge	Role playing & Group discussion	Assignments/Logbook & Topic presentation – Using Rubrics
<b>e.0</b>	<b>Psychomotor</b>		
e.1	e.1.1 - Perform comprehensive examination, safe and effective physical therapy interventions for Pediatric, orthopedics, Neurology, Cardiopulmonary diseases and adult Cardiopulmonary diseases.	Teacher demonstration, Nonlinguistic representation (Physical models, Kinesthetic	Practical demonstration / case presentation with the

		representations), Simulation/ Role playing, Hands on, active participation	patients <b>SUMMATIVE EVALUATION</b> [Midterm exams] 1.Clinical Demonstration and Evaluation by Standardized /Benchmark rubrics for clinical skills
5.2	NA		

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct



Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam Practical	6,	25%
2	Second Midterm exam-Practical	12	25%
3	Log Book	14	5%
4	Assignments or topic Presentations	14	5%
	Final exam Practical	16	40%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Day	Dr. Mahamed Ateef	Ms.Rashmi.A.Saibannavar
Sunday		11.00-2.30 P M.
Monday		
Tuesday	8.00- 12pM	8.00-10.00 A.M
Wednesday		
Thursday		12,30-2.30 p.m

#### E. Learning Resources

1. List Required Textbooks

- **Clinical Case Studies in Physiotherapy-Lauren Cuthrie**
- **Guide to Physical Therapy Practice. American Physical Therapy Association, 1999**
- **Developing Professional Behaviors Kasar J, Clark EN, Slack, 2000, Thorofare NJ.**
- **SAUNDER'S Manual of Physical Therapy practice.**

2. List Essential References Materials (Journals, Reports, etc.)

- **Physical Therapy Clinical Performance Instrument; American Physical Therapy Association,1997**

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

**Physical Rehabilitation, Assessment and Treatment Susan B.O'Sullivan ,Thomas J. Schmitz, 5<sup>th</sup> Edition.**

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

[www.apta.org](http://www.apta.org)  
[www.physio-med.com](http://www.physio-med.com)  
[www.medsourceusa.com](http://www.medsourceusa.com)  
[www.books.google.co.in](http://www.books.google.co.in)  
[www.amazon.co.uk/patient](http://www.amazon.co.uk/patient) care  
[www.wcpt.org](http://www.wcpt.org)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

[WWW.PEDro.org](http://WWW.PEDro.org)

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> <li>➤ <b>Multi-specialty Hospital</b></li> <li>➤ <b>Physical Therapy out-patient service</b></li> <li>➤ <b>Rooms should be comfortable according to the strength of the students.</b></li> </ul>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> <li>➤ <b>One computer in the classroom,</b></li> <li>➤ <b>Projector. (In classroom)</b></li> <li>➤ <b>Smart board. (In classroom)</b></li> <li>➤ <b>Data show. (In classroom)</b></li> </ul>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p>NA</p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> <li>➤ <b>Asking question before, during and after each lecture</b></li> <li>➤ <b>Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</b></li> <li>➤ <b>Examination</b></li> </ul>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p> <ul style="list-style-type: none"> <li>➤ <b>Lecturer to request the peer teaching staff to attend the lecture and request them for expertise opinion.</b></li> <li>➤ <b>To conduct debate among the students , the topic should be decided by the Teacher</b></li> </ul>
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> <li>➤ <b>Attending frequent workshops</b></li> <li>➤ <b>Efficient &amp; effective use of teaching methods</b></li> <li>➤ <b>Easy &amp; illustrative examples</b></li> </ul>



4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

**Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.**

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- **Continuous evaluation of the students during the term, and frequent updating of the course content using Rubrics.**

Faculty or Teaching Staff: \_\_ Dr. Mahamed Ateef ( Male Section )

\_\_\_\_\_ Mrs. Rashmi.A.Saibannavar ( Female Section

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Course Coordinator: \_\_\_\_\_ Signature: \_\_\_\_\_

Received by: Dr. Fuzail Ahmad

Department Head

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**SELECTED CLINICAL TOPICS**

**RHPT 494**

## Course Specifications

Institution: MAJMAAH UNIVERSITY	Date of Report:
College/Department: College of Applied Medical Sciences / Department of Physical Therapy & Health Rehabilitation	

### A. Course Identification and General Information

1. Course title and code: Selected Clinical Topics & RHPT 494			
2. Credit hours: 2			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course Name of faculty member responsible for the course Course Coordinator : <b>Dr. Shaik Abdul Rahim</b> (Section: 941) Course Instructors : <b>Mr.Faizan Zaffar Kashoo</b> (Section:940) <b>Mrs.Menaz Sheikh</b> (Section: 193)			
5. Level/year at which this course is offered: Level 9 / 4 <sup>th</sup> Year			
6. Pre-requisites for this course (if any) RHPT 474, RHPT 476 & RHPT 483			
7. Co-requisites for this course (if any)			
8. Location if not on main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100 %"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
e. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course? This course will further develop physiotherapy competencies in a range of contexts/settings, with students managing clients across the lifespan. This will consist of pre-immersion coursework in the areas of physiotherapy practice; cardiorespiratory, musculoskeletal and neurology, completing simple and complex cases
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field) Students will be encouraged to do the following: a. Acquiring knowledge through the Internet, journals and verifying the other information resources. b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

In this course the student choose some cases and start to study and review the literature and all the previous research related to the topics. After that, the student will compare between the traditional and modern techniques in clinical presentation.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
Introduction of selected clinical topic Planning of clinical postings	1	4
Selection of appropriate clinical topics	1	4
Detailed assessment of the selected clinical topic	1	4
Differential diagnosis of the clinical topic & incorporation of the latest clinical tools.	1	4
Data collection from the clinical condition chosen	1	4
Assessment of the documentation by the students on the selected clinical topic	1	4
Selection of the appropriate rehabilitation plan	1	4
Execution of the treatment plan	1	4
Review of the improvement after every week and need to change the plan as per patients need	1	4
On-going assessment and documentation of functional improvement on relevant functional scale	1	4
Complete assessment and treatment of the 5 respective clinical topics	1	4
Evaluation of the documentation and clinical skills	1	4
Clinical case presentation	1	4

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	----	----	----	60	----	60
Credit	-----	-----	-----	30	-----	30

3. Additional private study/learning hours expected for students per week.	2 Hours
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A3.1	The student will be able to reproduce the assessment, investigative procedures, & appropriate interventions based on outcome measures of cardiopulmonary conditions.	Discussion by teacher, Text book assignments, homework & practice, summarizing & note taking, daily re-looping of previously learned material	Clinical case presentation and worksheets
<b>B</b>	<b>Cognitive Skills</b>		
B3.1	The student will be able to develop an effective and safe evidence-based physiotherapy intervention plan that is appropriate for the individual and prioritized in order to address assessment findings, while aiming to achieve the individual's treatment goals.	Case method, use of motion pictures	Scenario based question, Case study question
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
C2.1	The student will be able to demonstrate an understanding of the presentation and management of a wide range of disorders and diseases that need physical therapy while being respectful and sensitive to individual client needs.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Clinical case presentation and worksheets
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
D2.1	The student will be able to appraise an evidence-based approach, research and references to acquire a new knowledge.	Peer sharing, cooperative groups, tutorial, coaching, partner reading, paraphrasing	Clinical case presentation and worksheets
<b>E</b>	<b>Psychomotor</b>		
E1.1	The student will be able to perform comprehensive examination, safe and effective physical therapy interventions.	Teacher demonstration, Nonlinguistic representation (Physical models, Kinesthetic representations), Simulation/ Role playing, Hands on, active participation	Practical demonstration / case presentation with the patients
E1.2	The student will be able to evaluate the	Teacher demonstration, Nonlinguistic	Practical demonstration / case presentation with the



	effectiveness and efficiency of interventions by using appropriate re-evaluation and/or valid and reliable outcome measures.	representation (Physical models, Kinesthetic representations), Simulation/ Role playing, Hands on, active participation	patients
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### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	First Midterm exam – Clinical Case presentation	6	20%
2	Topic Presentation I & Log book	1-7	10%

3	Second Midterm exam – Clinical Case presentation	13	20%
4	Topic Presentation II & Log book	8-15	10%
5	Final exam – Clinical Case presentation	15	40%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Day	Dr.Shaik Abdul Rahim	Mr.Faizan zaffar Kashoo
Sunday	8am – 10am	10 am – 11.50 am & 1- 1.50 pm
Monday	8am – 10am	--
Tuesday	8am – 10am	--
Wednesday	8am – 10am	10 am – 11.50 am & 1- 2.50 pm
Thursday	-----	10 am – 11.50 am

#### E. Learning Resources

1. List Required Textbooks Physical Rehabilitation, Susan B. O'Sullivan PT EdD, 6 <sup>th</sup> edition
2. List Essential References Materials (Journals, Reports, etc.) <a href="http://www.apta.org">www.apta.org</a> <a href="http://www.wcpt.org">www.wcpt.org</a>
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc) 1. Essentials of Cardio Pulmonary Physical Therapy; Hillegass and Sadowsky, 3 <sup>rd</sup> edition. 2. Orthopedic Physical Assessment, David J. Magee PhD BPT, 5 <sup>th</sup> edition. 3. Neurological Rehabilitation, Darcy Ann Umphred PT PhD FAPTA, 6 <sup>th</sup> edition
4. List Electronic Materials (e.g. Web Sites, Social Media, Blackboard, etc.) <a href="http://www.physio-med.com">www.physio-med.com</a> <a href="http://www.medsourceusa.com">www.medsourceusa.com</a> <a href="http://www.books.google.co.in">www.books.google.co.in</a> <a href="http://www.en.wikipedia.org/wiki">www.en.wikipedia.org/wiki</a>
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in



classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
2. Computing resources (AV, data show, Smart Board, software, etc.)
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

### G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching a. Web based questionnaire at the end of the semester
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor a. Peer review b. Internal exams report analysis c. Course report analysis
3 Processes for Improvement of Teaching a. Efficient & effective use of teaching methods b. Implementation of regulation of unified course outcomes and class objectives in male & female sections c. Unified assessment methods based on rubrics. d. Involvement of faculty members in various professional activities by attending frequent workshops / CME etc., for continuous up gradation of Knowledge and skills.
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) NA

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Student feedback analysis
- Course report analysis
- Peer review report

Based on these reports the department make strategic action plan for each semester.

**Faculty or Teaching Staff: Mr. Faizan Zaffar Kashoo**  
**Mrs.Menaz Sheikh**

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_



**Course Coordinator: Dr. Shaik Abdul Rahim**

**Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad**

**Department Head**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**Research Methodology**

**RHPT495 & PHT 361**

## Course Specifications

Institution: <b>Majmaah University</b>	Date of Report
College/Department: <b>College of Applied Medical Sciences / Physical Therapy &amp; Health Rehabilitation</b>	

### A. Course Identification and General Information

1. Course title and code: <b>RHPT-495 Research Methodology</b>			
2. Credit hours 2 hours (2+0+0)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Bachelor of Physical Therapy and Health Rehabilitation</b>			
4. Name of faculty member responsible for the course:			
Course Coordinator	: <b>Dr. Fuzail Ahmad</b>	(Section: -----)	
Course Instructors	: <b>Dr. Salamah Aldajah</b>	(Section: -----)	
	<b>Dr. Shaik Abdul Rahim</b>	(Section: 1577)	
	<b>Ms. Minaz Shaikh</b>	(Section: -----)	
5. Level/year at which this course is offered 4 <sup>th</sup> year, level 9			
6. Pre-requisites for this course (if any): RHPT 482, 483,484			
7. Co-requisites for this course (if any) NA			
8. Location if not on main campus			
* 9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

1. What is the main purpose for this course? <i>The course has been planned with a focus on research in health and rehabilitation sciences, and it will enable students to critically analyse research literature in this field, design research studies to address relevant questions, analyse and interpret research findings, understand advanced statistical methods, research dissemination, and appreciate the ethical and practical implications of conducting research in the health professions.</i>
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field). <i>For better regulation of the course, an activity log has been developed to tract the outcomes covered in the timely manner.</i>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
<b>Introduction for research</b> <ul style="list-style-type: none"> <li>Importance and foundation of research</li> <li>What is scientific research</li> <li>Why do research</li> <li>Who should do research</li> <li>Where we do research</li> </ul> Text Book Chapter2	1	2
<b>Research Ethics:</b> <ul style="list-style-type: none"> <li>Ethical Principles and Human Participation Protections</li> <li>IRB and Informed Consent</li> <li>Plagiarism</li> </ul> Text book chapter: 4	2	4
<b>Stages of the Scientific Research Process</b> <b>Types of research</b> <ul style="list-style-type: none"> <li>Research foundation and frame work</li> <li>Research question</li> <li>Research design</li> <li>(chapter 5, 7,8)</li> </ul>	2	2



<b>- Formulating the Hypotheses</b> <ul style="list-style-type: none"> <li>• Writing hypothesis</li> <li>• Null hypothesis</li> <li>• Alternative hypothesis</li> </ul> <b>- Types of Study Variables</b> <ul style="list-style-type: none"> <li>• Independent and Dependent Variables</li> </ul> Chapter Chapter5	1	2
<b>In-Course Exam I (Theoretical midterm )</b>		1
<b>Recruitment and Sampling.</b> <ul style="list-style-type: none"> <li>• Identify population and sample group</li> <li>• Random &amp; Non-probability sampling methods</li> <li>• Importance of random sample.</li> <li>• Chapter 9</li> </ul>	2	3
<b>Data Collection &amp; Measurement</b> <ul style="list-style-type: none"> <li>• Reliability, validity</li> <li>• Research power</li> <li>• Chapter 10,11</li> </ul>	2	4
<b>Data Analysis and Interpretation of Results.</b> <ul style="list-style-type: none"> <li>• descriptive statistics</li> <li>• Inferential statistics</li> <li>• Levels of measurement</li> <li>• The importance of data type.</li> </ul> Chapter 12,13	1	2
<b>In-Course Exam II (Theoretical midterm )</b>		1
<b>Writing a research proposal</b> <b>Components of the proposal.</b> <ul style="list-style-type: none"> <li>• Characteristics of each component.</li> <li>• Principles of writing for scientific journals</li> </ul> Chapter 14	2	3
<b>Practice presentation in class</b> <ul style="list-style-type: none"> <li>• Effective presentation</li> <li>• How to prepare research paper in form of Ppt.</li> <li>• presentation and Poster (project presentation)</li> </ul> Chapter 15,16	2	4
<b>Final Exam</b>		

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30					30
Credit	2					2

3. Additional private study/learning hours expected for students per week.	2
--	---

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A3.1	The student will be able to <b>recognize</b> the research process and evidence-based practice.	Lectures, and Illustrations	Written, Oral Exams and Assignments
<b>B</b>	<b>Cognitive Skills</b>		
B3.1	The student will be able to evaluate the empirical, methodological and epistemological issues involved in Physical therapy research.	Lectures, illustrations and group discussions	Written, Oral Exams and Assignments
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
C1.1	The student will be able to understand the process of disseminating research findings for adding to the body of knowledge in the field of Physical therapy.	Lectures, illustrations and group discussions	Group Discussion and Presentations
C2.1	The student will be able to demonstrate an understanding of the importance of ethics and human relations in the field of Physical therapy research.	Lectures, illustrations and group discussions	Group Discussion and Presentations
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
D1.1	The student will be able to develop an understanding of interdisciplinary research to propose a holistic solution	Assignments, presentations and group discussion	Group Discussion and Presentations
D2.1	The student will be able to demonstrate the ability to use computers and information technology for research and scientific writing.	Assignments, presentations and group discussion	Group Discussion and Presentations

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write



<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	In-course evaluation 1,2 MCQ, Short essay	6,11	40%
2	Critique of published articles/oral presentation (4)	7,9,12,14	20%
3	Final Exam (MCQ, Short essay)	16	40%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

**Students can meet the faculty during the office hours mentioned in the Schedule .**

#### E. Learning Resources

1. List Required Textbooks

Susan L. Norwood. Research Essentials foundations for Evidence- Based Practice, (2010) Pearson, Boston USA,

2. List Essential References Materials (Journals, Reports, etc.)

Physical therapy journal

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- Lecture room suitable for 25 students.

<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <p>One computer in the classroom,</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> One computer in the classroom,</li> <li><input checked="" type="checkbox"/> Projector.</li> <li><input checked="" type="checkbox"/> Smart board.</li> <li><input checked="" type="checkbox"/> Data show Projector.</li> <li><input checked="" type="checkbox"/> Smart board.</li> <li><input checked="" type="checkbox"/> Data show</li> </ul>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p>

## G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor</p> <ul style="list-style-type: none"> <li>a. Asking question before, during and after each lecture</li> <li>b. Provision of appraisal form to the students &amp; to rectify changes if any</li> <li>c. Exams</li> </ul>
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> <li>1. Attending frequent workshops</li> <li>2. Efficient &amp; effective use of teaching methods</li> <li>3. Easy &amp; illustrative examples</li> </ul>



4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another 2 colleagues in the same field



5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

1. Peer review of the course taught
2. Stake holder's feedback on the course taught.
3. Keeping track of any recent advances in the field of management

Faculty or Teaching Staff: **Dr. Salameh Al Dajah**  
**Dr. Shaik Abdul Rahim**  
**Ms. Minaz Shaikh**

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Received by: **Dr. Fuzail Ahmad**

Dean/Department Head

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**RHPT 496 – PATIENT CARE  
1435-1436-2<sup>nd</sup> Semester**

## Course Specifications

Institution- <b>Majmaah University - College of Applied Medical Sciences</b> Date of Report-19/ 04/ 1436H
College/Department - <b>Department of Physical Therapy &amp; Health Rehabilitation</b>

### A. Course Identification and General Information

1. Course title and code: PATIENT CARE – RHPT 496			
2. Credit hours – 2(2+0+0)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Physical Therapy and Rehabilitation Health Program</b>			
4. Name of faculty member responsible for the course Course Coordinator : Mr. Faizan Zaffar Kashoo (Section:943 ) Course Instructors : Mrs.Rashmi.A.Saibannavar (Section: 195 )			
5. Level/year at which this course is offered - Level – 9/ 4 <sup>th</sup> Year			
6. Pre-requisites for this course (if any) NA			
7. Co-requisites for this course (if any) NA			
8. Location if not on main campus NA			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100%"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			



## B Objectives

1. What is the main purpose for this course?
This course prepares the future physical therapist to provide first aid in case of emergency. Develops skills in draping patients, body mechanics, transfers, and vital signs.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
1. The Lecturers should give more lively examples in order to improve the thought process of the students. (More diagrams/images, videos, podcasts, etc.)
2. Students will be encouraged to do the following:
a. Acquiring knowledge through the Internet, journals and verifying the other information resources.
b. Sharing the acquired knowledge with critical/lateral thinking & clinical reasoning.
Conduct field visits to electrotherapy department in hospitals

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

The Aims of the course is to identify ways to the primary care of the patients and methods of dealing with medical emergency and first aid as well as ways and CPR.

1. Topics to be covered		
List of Topics	No. of Weeks	Contact Hours
<b>1. First Aid</b> A. "ABCH" victim assessment B. First aid for bleeding and wounds. C. Splinting in fracture D. In-line stabilization for head, neck and back injuries E. First Aid Kits F. Cardio pulmonary resuscitation G. Support devices includes Types of bandages and materials	Week 1 & 2	04
<b>2. Positioning and Draping</b> A. Decubitus ulcers (Pressure sores) B. Stages Of Tissue Breakdown C. Goal for Proper Positioning D. Preventive Devices Used To Prevent Pressure Ulcers E. Preventive Positioning F. Draping	Week 3	02

<b>3. Transfer Activities</b> A. Types of transfers <ul style="list-style-type: none"> <li>- Standing includes Dependent pivot, Assisted pivot, Standby pivot and Independent pivot,</li> <li>- Sitting includes Lateral assisted transfer, Independent transfer and Dependent lift</li> <li>- Recumbent includes Dependent lift</li> </ul> B. Mobility activities C. Transfer activities	Week 4&5	04
<b>In course examination 1(Mid Term Exam – Theory &amp; Practical)</b>	Week 6	
<b>4. Body mechanics</b> A. Principles and Concepts of proper body mechanics B. Lifting principles and techniques. C. Pushing, Pulling, Reaching and Carrying. D. Posture and body control	Week 7	02
<b>6. CPR( Cardiopulmonary resuscitation)</b> A. Essential elements in CPR B. Difference between Adult and child CPR	Week 8 and 9	02
<b>7. Documentation</b> A. Essential components of patient documentation. B. The importance of documentation. C. The essential components of patient documentation.	Week 10 and 11	02
<b>In course examination 1(Mid Term Exam – Theory &amp; Practical)</b>	Week 12	
<b>8. Role of Physical Therapy in ICU</b> A. Goals of PT in ICU B. Assessment of systems in ICU C. Assessment along with examination. D. Types of Physical Therapy techniques in ICU	Week 13 & Week 14	04
<b>9.Hand hygiene</b>	Week 15	02
<b>Final Theory examination</b>	Week16	

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30	-	-	-	-	30
Credit	30	-	-	-	-	30

3. Additional private study/learning hours expected for students per week.	2 hrs/Week
--	------------

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. **Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains.** Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
A	Knowledge		

(A1.1)	The student will be able to recognize the basic knowledge, skills & attitudes required for the promotion of health & well-being of the patients	Lecture, Lecture -demonstration & class discussion by teacher, Textbook assignments open textbook study, homework & practice, summarizing & note taking, daily re-looping of previously learned material.	Theoretical Exams (MCQ, SAQ), Quiz & Assignment – using RUBRICS
(A1.2)	The student will be able to identify the appropriate tools for safe patient handling.		
B	Cognitive Skills		
(B1.1)	The student will be able to formulate appropriate safety measures according to the patient body mechanics.	Case method, use of motion pictures, educational films, pod cats & video tapes	Scenario based question, Theoretical Exams (SAQ/Case study), Quiz & Assignments- using RUBRICS.
(B1.2)	The student will be able to develop an effective and safe evidence based physical therapy intervention plan that is appropriate for the individual.		
3.0	Interpersonal Skills & Responsibility		
	NA		
4.0	Communication, Information Technology, Numerical		
	NA		
5.0	Psychomotor		
5.1	NA		

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret,

	appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

## D. Student Academic Counseling and Support

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
<b>1</b>	Quizzes	4, 10	10%
<b>2</b>	First Midterm exam	6	20%
<b>3</b>	Second Midterm exam	12	20%
<b>4</b>	Assignments	Throughout the course	10%
<b>5</b>	Final exam	16	40%

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Day	Mrs. Rashmi Saibannavar	Mr. Faizan Zaffar
Sunday	11-1.30 am	1-2 pm
Monday	12.30- 1.30 pm	--
Tuesday	--	--
Wednesday	--	9-10 am
Thursday	12.30- 1.30 pm	--

## E. Learning Resources

1. List Required Textbooks
❖ Pierson and Fairchild's Principles & Techniques of Patient Care- Sheryl L. Fairchild 5 th edition, Elsevier
2. List Essential References Materials (Journals, Reports, etc.)
❖ Minor MA, Minor SD: Patient Care Skills, Mary Alice Duesterhaus Minor, 6 th edition
❖ Bircher W: <i>Lukan's Documentation for Physical Therapist Assistants (3rd ed)</i> . Philadelphia: FA Davis, 2008. 978-0-8036-1709-4
❖ Ethics in Rehabilitation; Korblau BL, Starling SP, Slack, 2000
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
❖ First Aid By American Academy of Orthopaedic Surgeons (AAOS), Alton L. Thygerson, Steven M. Thygerson
❖ Physical rehabilitation : Assessment and Treatment , <u>Susan B. O'Sullivan</u> , <u>Thomas J. Schmitz</u> , 5 th Edition

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)
<ul style="list-style-type: none"> <li>❖ <a href="http://www.apta.org">www.apta.org</a></li> <li>❖ <a href="http://www.physio-med.com">www.physio-med.com</a></li> <li>❖ <a href="http://www.medsourceusa.com">www.medsourceusa.com</a></li> <li>❖ <a href="http://www.books.google.co.in">www.books.google.co.in</a></li> <li>❖ <a href="http://www.amazon.co.uk/patient">www.amazon.co.uk/patient</a> care</li> <li>❖ <a href="http://www.wcpt.org">www.wcpt.org</a></li> </ul>
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
Lecture room suitable for 25 students.
2. Computing resources (AV, data show, Smart Board, software, etc.)
<ul style="list-style-type: none"> <li>❖ One computer in the classroom,</li> <li>❖ Projector. (In classroom)</li> <li>❖ Smart board. (In classroom)</li> <li>❖ Data show. (In classroom)Internet in lecture hall and lab</li> </ul>
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
➤

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> <li>❖ Asking question before, during and after each lecture</li> <li>❖ Provision of appraisal form to the students &amp; to rectify changes if any – done through HOD consent</li> <li>❖ Obtaining Assignments and home work through D2L.</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
<ul style="list-style-type: none"> <li>❖ Frequent feedback from the students &amp; clarification of doubts now &amp; then.</li> <li>❖ Feedback from the students oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff.</li> </ul>
3 Processes for Improvement of Teaching

<ul style="list-style-type: none"> <li>❖ Attending frequent workshops and conference on first aid and emergency handling of victim.</li> <li>❖ Efficient &amp; effective use of teaching methods (RUBRICS used to evaluate assignments and class activities.</li> <li>❖ Implementation of D2L learning management system</li> <li>❖ Planning to make assignments &amp; tutorial by e-class room</li> <li>❖ Easy &amp; illustrative examples</li> </ul>
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"> <li>❖ Discussion of the course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field.</li> <li>❖ Matrix – Mapping</li> <li>❖ Peer review / department council committee review</li> </ul>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none"> <li>❖ Continuous evaluation of the students during the term, and frequent updating of the course content.</li> <li>❖ Planning to make quizzes &amp; Assignments online</li> </ul>

**Faculty or Teaching Staff: Mr. Faizan Zaffar Kashoo & Mrs.Rashmi.A.Saibannavar**

**Signature:** \_\_\_\_\_ **Date Report Completed:** 19/ 04/ 1436H

**Course Coordinator: Mr. Faizan Zaffar Kashoo Signature:** \_\_\_\_\_

**Received by: Dr. Fuzail Ahmad**

**Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_





**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CS)**

**Independent Study**

**RHPT 497**

## Course Specifications

Institution: College of Applied Medical Sciences / Majmaah University Date of Report:
College/Department : Applied Medical Sciences / Physical Therapy & Health Rehabilitation

### A. Course Identification and General Information

1. Course title and code: Independent Study, RHPT 497			
2. Credit hours: 2 (2+0+0)			
3. Program(s) in which the course is offered: Physical Therapy (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course: Course Coordinator : <b>Dr. Fuzail Ahmad</b> (Section: 944) Course Instructors : <b>Dr. Shaik Abdul Rahim</b> (Section: 945) <b>Dr. Mahamed Ateef</b> (Section: 946)			
5. Level/year at which this course is offered: 9 <sup>th</sup> level / 4 <sup>th</sup> year			
6. Pre-requisites for this course (if any): RHPT 481,82,83			
7. Co-requisites for this course (if any):			
8. Location if not on main campus: NA			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100"/>
b. Blended (traditional and online)	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
c. e-learning	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
d. Correspondence	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
f. Other	<input type="text" value="NA"/>	What percentage?	<input type="text" value="NA"/>
Comments:			

## B Objectives

<p>1. What is the main purpose for this course?</p> <p>The course involves students planning and conducting a research project under the supervision of academic staff. Students will be required to perform all aspects of research required for completion of the project, which may include gaining ethics approval, patient recruitment, data collection and statistical analysis. Students will write a research report in the form of a manuscript for a peer-reviewed journal.</p>
<p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <p>This course aims to enhance students' ability to:</p> <ol style="list-style-type: none"> <li>1. Identify and pose a research question</li> <li>2. Make a critical analysis of the literature relevant to the research project</li> <li>3. Design and conduct an investigation in a systematic and scientific manner</li> <li>4. Conduct appropriate analysis of the data collected</li> <li>5. Draw logical conclusions from the research findings, and</li> <li>6. Communicate results clearly by way of a research manuscript suitable for publication in a scientific journal of the student's discipline.</li> </ol>

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
1. Introduction to Principles of Research in Physical Therapy: Definition of research (What is research?)Reasons for developing research in physical therapy (Why research?),Evidence-based practice, Who should research?, Barriers of research, Developing answerable research problem	1	2
2. Roots of Scientific Inquiry: Research design, Methods of obtaining knowledge (Research Paradigms: Quantitative / Qualitative / Single-system),Basics of data, Dependent & independent variables, Research purposes, Timing of data collection (retrospective versus prospective),Research manipulation (experimental versus non-experimental),Students will be introduced to the topics of study for this semester	1	2

3. Finding Scientific Material (literature search): How to Conduct an Internet Search for Physical Therapy Literature	1	2
4. Preparation & Presentation of Research Proposal	1	2
5. Evaluating and Writing Review the Literature: Relevance of reviewing the literature, Types of literature, Elements of a research article, Guidelines for writing about published research, Evaluation of studies (trustworthiness), Research validity (internal, external, & construct validity), Sequence for evaluating the literature, Inter-rater & intra-rater reliability, Instrument reliability & validity, Research proposal	1	2
6. Conducting the Proposed Study or Survey or Systematic Review of Literature	6	12
7. Presentation of relevant literature and research findings	1	2
8. Writing the final report in the form a research project	1	2
9. Final presentation		

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	2	NA	NA	NA	NA	30
Credit	2	NA	NA	NA	NA	30

3. Additional private study/learning hours expected for students per week.	2
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>A</b>	<b>Knowledge</b>		
A3.1	The student will be able to describe the steps needed to identify a suitable physical therapy research.	Discussion on literature review, debates, case studies and seminars	Research proposal, Presentations and discussion
<b>B</b>	<b>Cognitive Skills</b>		
B3.1	The student will be able to formulate a focused, testable hypothesis or research question that can be feasibly investigated within a specified time period.	Discussion on literature review, debates, case studies and seminars	Review of literature, Presentations and discussion
<b>C</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
C1.1	The student will be able to work with a faculty mentor to design an appropriate study that would investigate the research question.	Debates, case studies and seminars	Presentations and discussion
C2.1	The student will be able to demonstrate understanding of the importance of ethics and human relations in Physical therapy research.	Debates, case studies and seminars	Presentations and discussion
<b>D</b>	<b>Communication, Information Technology, Numerical</b>		
D1.1	The student will be able to utilize appropriate software; including word processing, figures/tables and referencing, to produce a scientific written report	Debates, case studies and seminars	Presentations and discussion
D2.1	The student will be able to exhibit skill in synthesizing and analyzing information gained from the field and secondary sources.	Debates, case studies and seminars	Presentations and discussion

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
	demonstrate, show, illustrate, perform, dramatize, employ, manipulate,



<b>Psychomotor</b>	operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct
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Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assessment of the submitted Proposal	4	20%
2	Research proposal presentation	6	20%
3	Presentation of relevant literature	11	20%
4	Evaluation of the submitted project	13	20%
5	Final presentation and viva voce	15	20%



#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Day	Dr. Fuzail Ahmad	Dr. Shaik Abdul Rahim	Dr. Mahamed Ateef
Sunday	Office hours	Office hours	Office hours
Monday	Office hours	Office hours	Office hours
Tuesday	Office hours	Office hours	Office hours
Wednesday	Office hours	Office hours	Office hours
Thursday	Office hours	Office hours	Office hours

#### E. Learning Resources

1. List Required Textbooks

- Physical Therapy Research: Principles and Applications - Domholdt E, WB Saunders Company, 2000.

2. List Essential References Materials (Journals, Reports, etc.)

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- Foundations of Clinical Research: Applications to Practice - Portney LG, Williams & Wilkins, 2000.

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

- <http://www.sdl.edu.sa/Pages/universities.aspx>
- <http://mu.edu.sa/en/colleges/college-applied-medical-sciences/d2l-tutorials>
- <http://www.library.uq.edu.au/lr/HRSS4100>
- <https://student.my.uq.edu.au/>

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- Lecture room suitable for 25 students.
- Separate demonstration room suitable for 15 students.

2. Computing resources (AV, data show, Smart Board, software, etc.)
<ul style="list-style-type: none"> <li>• One computer in the classroom, and another in the lab.</li> <li>• Projector. (In both classroom and lab)</li> <li>• Smart board. (In both classroom and lab)</li> <li>• Data show (In both classroom and lab)</li> </ul>
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
<ul style="list-style-type: none"> <li>• A detailed list of research equipment is attached.</li> </ul>

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> <li>• Asking question before, during and after each lecture</li> <li>• Provision of appraisal form to the students &amp; to rectify changes if any</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
<ul style="list-style-type: none"> <li>• Frequent feedback from the students &amp; clarification of doubts now &amp; then</li> <li>• Feedback from the students through oral or written about the lecture by the supervisor or HOD of the department &amp; later to discuss the issues if any with the concerned staff.</li> </ul>
3 Processes for Improvement of Teaching
<ul style="list-style-type: none"> <li>• Attending frequent workshops / conferences</li> <li>• Efficient &amp; effective use of teaching methods</li> <li>• Easy &amp; illustrative examples</li> </ul>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
<ul style="list-style-type: none"> <li>• Discussion of the course objectives, teaching strategies, students learning abilities and achievements, with another colleague in the same field.</li> <li>• Matrix – Mapping</li> <li>• Peer review / department council committee review</li> </ul>



5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Continuous evaluation of the students during the term, and frequent updating of the course content.

Faculty or Teaching Staff: **Dr. Shaik Abdul Rahim**  
**Dr. Mahamad Ateef**

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Received by: **Dr. Fuzail Ahmad** Dean/Department Head

Signature: \_\_\_\_\_ Date: \_\_\_\_\_