



**CLINICAL MASTER PROGRAM IN  
REHABILITATION SCIENCES AT JUST  
(JUST – CRS)**

**COURSE INFORMATION PACKAGE  
(COURSE CATALOGUE)**

**COURSE INFORMATION**

Course title	Code	Semester	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	National Credit	ECTS
Advance Theories and Practice in Orthopedic Rehabilitation I	CRS 736	II, III	2	1	-	2	5
<b>Prerequisites</b>	None						
<b>Course language</b>	English						
<b>Course type</b>	Elective						
<b>Mode of delivery (face to face, distance learning, blended)</b>	<ul style="list-style-type: none"> <li>• Blended</li> <li>• Face to face</li> </ul>						
<b>Learning and teaching strategies</b>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Demonstration</li> <li>• Modeling</li> <li>• Clinical simulation</li> <li>• Discussion</li> <li>• Team/group work</li> <li>• Problem solving</li> <li>• Self-directed learning</li> <li>• Literature appraisal</li> <li>• Online environment</li> </ul>						
<b>Course Description</b>	This course is structured to provide advanced evidence-based clinical evaluation and treatment of the cervical and thoracic spine, shoulder, elbow, wrist and hand in interdisciplinary orthopedics rehabilitation, utilizing advanced orthopedic skills. Emphasis will be placed on enhancing clinical decision making skills and integrating patients' evaluation, and patients' prognosis as well as individualized rehabilitation needs in patient's plane of care.						
<b>Course objective</b>	This course aims to expand knowledge and skills of students in orthopedics rehabilitation to interdisciplinary context. This course provided a venue to apply models of practice, clinical reasoning, and evidence-based practice in orthopedics rehabilitation. This course sharpens students' skills in comprehensive assessment and evaluation of patients' needs. This course will also enhance students' skills in treating variety of orthopedic cases using manual therapy techniques.						
<b>Learning outcomes</b>	Upon successful completion of the course, the students will be able to: 1- Identify interdisciplinary rehabilitation needs for patients with upper quadrant disorders.						



	<ol style="list-style-type: none"> <li>2- Critically apply measurements properties used in orthopedics rehabilitation to interdisciplinary clinical rehabilitation.</li> <li>3- Evaluate examination findings to comprehensively establish patient's diagnosis, prognosis, and plan of care, demonstrating advanced clinical reasoning.</li> <li>4- Justify the selection of outcome measures in patients' assessment, evaluation, and establishing treatment plan in a clinical interdisciplinary rehabilitation context.</li> <li>5- Critically evaluate their previous practice in orthopedics rehabilitation</li> <li>6- Design effective and comprehensive treatment plan based upon evidence-based practice.</li> <li>7- Demonstrate proficiency in the performance of examination and treatment techniques for the cervical, thoracic, shoulder, elbow, wrist and hand regions to include a variety of manual therapy approaches.</li> </ol>
<b>Course Content</b>	<ul style="list-style-type: none"> <li>• Assessment and evaluation of the cervical, thoracic, shoulder, elbow, wrist and hand regions.</li> <li>• Management of the cervical, thoracic, shoulder, elbow, wrist and hand regions.</li> <li>• Physical rehabilitation outcome measures</li> <li>• Evidence based clinical reasoning</li> <li>• Practical proficiency at manual therapy techniques for upper limb and cervico-thoracic spine</li> </ul>
<b>References</b>	<ul style="list-style-type: none"> <li>• Dutton, M. Dutton's Orthopedic: Examination, Evaluation and Intervention. New York; McGraw-Hill Medical. 2016.</li> <li>• Magee, DJ. Orthopedic Physical Assessment. Alberta, Canada; Sanders. 2014</li> <li>• Clinical Orthopedic Rehabilitation: An Evidence-Based Approach; Brotzman 2011</li> </ul>

### COURSE OUTLINE-WEEKLY

<b>Weeks</b>	<b>Topics (Theoretical, Practice – Lab &amp; hands on skills [P])</b>
1.	Evaluation principles and concepts Clinical reasoning in interdisciplinary orthopedic practice- Case studies [P]
2.	Evaluation and treatment of cervical spine 1 Evaluation of cervical spine [P]
3.	Evaluation and treatment of cervical spine 2 Treatment of cervical spine [P]
4.	Evaluation and treatment of cervicothoracic and thoracic spine Evaluation of cervicothoracic and thoracic spine [P]
5.	Evaluation and treatment of specific shoulder pathologies I Treatment of cervicothoracic and thoracic spine [P]
6.	Evaluation and treatment of specific shoulder pathologies II Application: Evaluation of shoulder
7.	Evaluation and treatment of shoulder instability- Post operative management Application: Shoulder treatment
8.	Evaluation and treatment of shoulder hypomobility Application: Shoulder case studies
9.	Evaluation and treatment of elbow pathologies 1 Application: Evaluation of elbow
10.	Evaluation and treatment of elbow pathologies 2- Post operative management Application: Treatment of elbow
11.	Evaluation and treatment of wrist pathologies 1 Application: Evaluation of wrist



12.	Evaluation and treatment of wrist pathologies 2- Post operative management Application: Treatment of wrist
13.	Evaluation and treatment of hand pathologies 1 Application: Evaluation of hand and Post operative management, Treatment of hand
14.	Special topics in orthopedics rehabilitation Check-off practical exam
15.	Final exam week

*\*In accordance with the structure of the course, activities such as presentations, projects, seminars, and portfolios can be used in the evaluation system as a midterm exam.*

## ASSESSMENT METHODS

Course activities	Number	Percentage**
Attendance		
Laboratory –check-off final exam	1	30
Application		
Field activities		
Specific practical training		
Assignments	2	30
Presentation		
Discussion		
Project		
Seminar		
Portfolio		
Online environment*		
Midterms (theoretical, practical)		
Final exam (theoretical)**	1	40
Total		100
<b>Percentage of semester activities contributing grade success</b>		60
<b>Percentage of final exam contributing grade success</b>		40
<b>Total</b>		100



## WORKLOAD AND ECTS CALCULATION

Activities	Number	Duration (hour)	Total Work Load
Course Duration (x14)	14	2	28
Laboratory			
Application	14	1	14
Specific practical training			
Field activities			
Study Hours outside the classroom context (Preliminary work, reinforcement, self-directed learning etc.)	14	2	28
Presentation / Seminar Preparation			
Project			
Online environment	4	4	16
Homework assignment	2	15	30
Portfolio			
Midterms ( Study duration )			
Final Exam (Study duration) (practical and theoretical)	2	17	34
<b>Total Workload</b>			<b>150</b>

## MATRIX OF THE COURSE LEARNING OUTCOMES VERSUS PROGRAM OUTCOMES

Program Outcomes	Contribution level*				
	1	2	3	4	5
1- Design and implement autonomously a professional approach based on analysis of complex rehabilitation science knowledge					x
2- Design, deliver and evaluate educational process adapted or customize to different inter-professional contexts (academic/professional/community) using an effective pedagogical approach			x		
3- Provide and disseminate new evidence in accordance with research ethics using updated and integrated knowledge of research methods		x			



4- Develop, manage and organize strategic planning and decision making within the scope of the quality assurance, ethical rules, team development and cooperation		x			
5- Integrate health advocacy at an individual, community and policy levels to promote citizenship and inclusive development of communities			x		
6- Communicates effectively within multidisciplinary clinical or scientific contexts, based on collaborative approach.		x			
7- Plan, implement and advocate interdisciplinary healthcare services within deep understanding of health care systems to promote better networking, and comprehensive patient care.		x			

**\*1 Lowest, 2 Low, 3 Average, 4 High, 5 Highest**