**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
Research Methods in Rehabilitation Sciences	CRS 791	I	2	1		2	5

Prerequisites	None
Course language	English
Course type	Mandatory
Mode of delivery (face to face, distance learning, blended**)**	• Blended • Face to face
Learning and teaching strategies	• Online lectures recorded • Online lectures live • Online discussion board • Face to face, online tutorials
Instructor (s)	
Course description	This course provides an understanding methodologies commonly used in rehabilitation research and the opportunity to identify research questions and develop appropriate protocols
Course objective	This module aims to advance students' knowledge of rehabilitation research design and research methods, through critical analysis of research in the field rehabilitation sciences. The module will provide opportunities for students to explore and critique methodologies commonly used to advance rehabilitation practice. Students will be given opportunities to develop skills in conducting systematic literature reviews, critical appraisal, analyzing quantitative and qualitative data, research question development and design.
Learning outcomes	1. Critically examine the research process, including scientific and evidence based claims. 2. Understand and appriase statistical methods used in rehabilitation research. 3. Critically analyse a range of research methodologies and methods commonly used in rehabilitation research. 4. Explore and be able to select from different methods of data collection and analysis 5. Critically discuss and be able to apply the legal and ethical frameworks for rehabilitation research involving human participants 6. Critically discuss and debate local and international contexts of rehabilitation research 7. Effectively locate sources of information using systematic search techniques and use these to develop coherent arguments 8. Justify choices of research methodology and their capacity to address specific research questions
Course Content	• Theoretical perspectives of research design and methodology

	• Legal and ethical frameworks of rehabilitation research. • Quantitative approaches to research design, data collection and analysis. • Qualitative approaches to research design, data collection and analysis.. • Systematic literature review methodology and practice. • International contexts of research • Research proposal development.

References	1. Kielhofner, G. Research in occupational therapy, Renee R. Taylor PhD (Ed) FA Davis Company Philadelphia 2017.
	2. Designing Clinical Research" by Stephen B. Hulley, Steven R. Cummings, Warren S. Browner, Deborah G. Grady, and Thomas B. Newman, 4th edition. Lippincott Williams & Wilkins
	3. Batavia, M. (2001). Clinical research for health professionals: A user-friendly guide. Oxford: Butterworth-Heinemann. -Meltzoff, J. (1998).
	4. Critical thinking about research. Washington: American Psychological Association.
	5. Cochrane Handbook for Systematic Reviews of Interventions, 2008.
	6. HornerJ, MinifieFD. Reserachethics I: Responsibleconduct of research(RCR) – Historicaland Contemporany Issues pertainingto HumanandAnimalExperimental. JournalofSpeechLanguage Hearing Research, 2011, 54:S303-S329
	Other resources:
	7. Reviews & systematic reviews - what the difference? http://www.nlm.nih.gov/pubs/techbull/jf02/jf02_systematic_review s.HTML
	8. PRISMA statement – guidelines parasystematicand metanalysis reviews http://prisma–statement.org
	9. STARLITE- STAndards for ReportingLITEraturesearches
	10. CONSORT guidelines for reportingclinicalstudies
	11. STARD guidelines for reporting screening and diagnostic studies
	12. Tidier guidelines: template for intervention description and replication (TIDieR)
	13. Spirit guidelines
	14. Pedro scale
	15. CATs (CriticalAppraizedTopics)-Centreforevidencebased medicineat Oxford-http://www.cebm.net
	16. OpenAccess Journals - JSciMedCentral®openaccess platform
	17. Freewares for data management- Mendeley - https://www.mendeley.com; Zotero – www.zotero.org
	18. Equator website: http://www.equator-network.org/
	19. Online tutorials – for reportingresearch
	      http://www.kumc .edu/SAH/OTEd/jradel/effective.html
	      http://www.asha.org/about/events/convention/papers
	      http://www.missouri.edu/~writery

COURSE OUTLINE-WEEKLY

Weeks	Topics
1.	Research paradigm and level of evidence
2.	Qualitative research methods
3.	Quantitative research methods
4.	Sampling concepts Nature of data in quantitative research
5.	Quantitative data collection instruments and measurement concepts
6.	Testing hypothesis in quantitative research
7.	Sources of errors in research (external validity of research)
8.	Research reporting
9.	Research reporting
10.	Critically appraise research report
11.	Putting into practice. –designing a study and writing a research proposal
12.	Research Ethics
13.	Research Governance frameworks
14.	Presentation
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		
Application		
Field activities		
Specific practical training		
Assignments (critically apprise 2 papers)	1	40
Presentation		
Discussion		
Project (write research proposal)	1	60
Seminar		
Portfolio		
Online environment*		
Midterms		
Final exam**		
Total		100
Percentage of semester activities contributing grade success		
Percentage of final exam contributing grade success		
Total		100

WORKLOAD AND ECTS CALCULATION

Activities	Number	Duration (hour)	Total Work Load
Course Duration (x14)	14	2	28
Laboratory			
Application (online)	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 / Preparation			
Project	1	44	44
Online environment			
Homework assignment	1	36	36
Portfolio			
Midterms			
Final Exam			
Total Workload			150

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					
2. Design, deliver and evaluate educational process adapted or customize to different inter-professional contexts (academic/professional/community) using an effective pedagogical approach					
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					
5. Integrate health advocacy at an individual, community and policy levels to promote citizenship and inclusive development of communities					
6. Communicates effectively within multidisciplinary clinical or scientific contexts, based on collaborative approach.					
7. Plan, implement and advocate interdisciplinary healthcare services within deep understanding of health care systems to promote better networking, and comprehensive patient care.					

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