



**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 II | CRS 737 | II, III | 2 | 2 | | 3 | 5 |
| Prerequisites | Advance Theories and Practice in Orthopedics Rehabilitation I | | | | | | |
| Course language | English | | | | | | |
| Course type | Elective | | | | | | |
| Mode of delivery (face to face, distance learning, blended) | <ul style="list-style-type: none"> • Blended • Face to face | | | | | | |
| Learning and teaching strategies | <ul style="list-style-type: none"> • Lecture • Demonstration • Modeling • Clinical simulation • Discussion • Team/group work • Problem solving • Self-directed learning • Literature appraisal • Online environment | | | | | | |
| Course Description | This course is structured to provide advanced evidence-based interdisciplinary clinical evaluation and treatment of the lumbar spine and lumbopelvic region, hip, knee, ankle and foot 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 care plan. | | | | | | |
| Course objective | This course provides a venue to apply rehabilitation models of practice, clinical reasoning skills, and evidence-based practice in designing and implementing orthopedics rehabilitation plan. The course sharpens students' skills to effectively and safely apply treatment plans with continuous assessment, exercise prescription and establishing discharge plans. | | | | | | |
| Learning outcomes | The students will be able to: <ol style="list-style-type: none"> 1- Identify interdisciplinary rehabilitation needs for patients with lower quadrant disorders. 2- Construct individualized treatment plan using evidence-based clinical reasoning. 3- Contrast between different treatment approaches based on evidence and | | | | | | |



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| | <p>individuality of the case.</p> <p>4- Design effective and comprehensive treatment plans based upon evidence-based practice and clinical classification</p> <p>5- Apply the expected outcomes of variety of treatment interventions, including manual therapy techniques for the lumbar spine and lumbopelvic region, hip, knee, ankle and foot.</p> <p>6- Demonstrate proficiency in the performance of examination and treatment techniques for the lumbar spine and lumbopelvic region, hip, knee, ankle and foot.</p> |
| Course Content | <ul style="list-style-type: none"> • Assessment and evaluation of the lumbar spine and lumbopelvic region, hip, knee, ankle and foot. • Management of the lumbar spine and lumbopelvic region, hip, knee, ankle and foot. • Physical rehabilitation outcome measures. • Evidence based clinical reasoning. |
| References | <ul style="list-style-type: none"> • Dutton, M. Dutton's Orthopaedic: Examination, Evaluation and Intervention. New York; • Clinical Orthopaedic Rehabilitation: An Evidence-Based Approach; Brotzman 2011 • McGraw-Hill Medical. 2016. • Hengeveld E, Banks K, Newton M. Maitland's Vertebral Manipulation: Management of Neuromusculoskeletal Disorders. Butterworth-Heinemann. 2013. |

COURSE OUTLINE-WEEKLY

| Weeks | Topics (Theoretical, Practice – Lab & hands on skills [P]) |
|--------------|--|
| 1. | Lower quarter screening Application: Lab introduction |
| 2. | Classification of lumbar spine pathologies Application: Lumbar spine evaluation |
| 3. | Evaluation and treatment of lumbar hypomobility Application: Lumbar spine rehabilitation |
| 4. | Evaluation and treatment of lumbar instability Application: Core stability |
| 5. | Evaluation and treatment of the pelvic components Application: Pelvis evaluation and treatment |
| 6. | Evaluation and treatment of the hip pathologies Application: Hip evaluation and treatment |
| 7. | Evaluation and treatment of the hip-Post-operative management Application: Hip post-surgical rehabilitation |
| 8. | Evaluation and treatment of the knee pathologies I Application: Knee evaluation and treatment I |
| 9. | Evaluation and treatment of the knee pathologies II Application: Knee evaluation and treatment II |
| 10. | Evaluation and treatment of the knee-Post-operative management Application: Knee post-surgical rehabilitation |
| 11. | Evaluation and treatment of the ankle Application: Ankle evaluation and treatment |
| 12. | Evaluation and treatment of the ankle-Post-operative management Application: Ankle post-surgical rehabilitation |
| 13. | Evaluation and treatment of the foot Application: Foot evaluation and treatment |



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| 14. | Special topics in orthopedics rehabilitation Application: Case studies discussion |
| 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 | 1 | 30 |
| Field activities | | |
| Specific practical training | | |
| Assignments | 2 | 30 |
| Presentation | | |
| Discussion | | |
| Project | | |
| Seminar | | |
| Portfolio | | |
| Online environment* | | |
| Midterms | | |
| Final exam** | 1 | 40 |
| Total | | 100 |
| Percentage of semester activities contributing grade success | | 40 |
| Percentage of final exam contributing grade success | | 60 |
| Total | | 100 |



WORKLOAD AND ECTS CALCULATION

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



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|--|---|---|--|--|--|
| 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**