



### **THE VISION OF THE UNIVERSITY OF JORDAN**

A university excelling in pedagogy, research, and innovation and advancing in global standing

### **THE MISSION OF THE UNIVERSITY OF JORDAN**

Providing students with fulfilling learning experiences, conducting knowledge-producing research, and building firm societal ties, within an environment conducive to creativity, innovation, and entrepreneurship: making efficient use of resources and forging fruitful partnerships.

### **THE VISION OF THE SCHOOL OF REHABILITATION SCIENCES**

Leadership in the creation and development of knowledge, and in the preparation of human resources aspiring for excellence regionally and internationally

### **THE MISSION OF THE SCHOOL OF REHABILITATION SCIENCES**

To excel in the preparation and training of model rehabilitation personnel, who participate in the health and community sector, and provide the local and regional community with appropriate rehabilitation services based on needs. Through educational curricula that facilitates the implementation of up to date rehabilitation services based on the best available evidence.

### **THE MISSION OF THE DEPARTMENT OF PHYSIOTHERAPY**

The mission of the department of Physiotherapy is to graduate professionals in the field of physical therapy who are to contribute to the health needs of society through education, scholarly activities, research, service and professional practice.

### **THE VISION OF THE DEPARTMENT OF PHYSIOTHERAPY**

The vision of the Department of Physical Therapy is to be recognized as an outstanding educational program with high quality faculty members, staff and students

## Course Syllabus

1	Course title	<i>Orthotics Clinical placement general</i>	
2	Course number	<i>1833464</i>	
3	Credit hours	<i>2 Practical</i>	
	Contact hours (theory, practical)	<i>60 Practical</i>	
4	Prerequisites	<i>Successful completion of 1833361 &amp; 1833464</i>	
5	Program title	<i>BSc in prosthetics and orthotics</i>	
6	Program code	<i>3</i>	
7	Awarding institution	<i>The University of Jordan</i>	
8	School	<i>School of Rehabilitation sciences</i>	
9	Department	<i>Department of prosthetics and orthotics</i>	
10	Course level	<i>Undergraduate</i>	
11	Year of study and semester (s)	<i>2023/2024, second semester</i>	
12	Other department (s) involved in teaching the course	<i>N/A</i>	
13	Main teaching language	<i>English</i>	
14	Delivery method	✓Face to face learning <input type="checkbox"/> Blended <input type="checkbox"/> Fully online	
15	Online platforms(s)	✓Moodle <input type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....N/A.....	
16	Issuing/Revision Date	<i>Feb 2024</i>	

### 17Course Coordinator:

Name: **Dr. Amneh Alshawabka**

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### 18 Other instructors:

Name:

1. Mrs. Mayson / class 1
2. Mr Feras Qasem /class 2
3. Mr Hatem Massadah / class 3

### 19 Course Description:

Through this course, the student will have experience in supplying spinal as well as upper and lower extremity orthoses for patients of different pathological conditions in the clinical environment. The aim is to ensure that the students have the skills and basics of patients' assessment, evidence-based prescription, clinical provision of orthoses and manufacturing of orthoses. In addition, higher educational learning objectives, including analyzing a complex case and creating a solution will be emphasized.

### 20 Course aims and outcomes:

## A- Aims:

- 1- To thoroughly assess patients
- 2- To formulate orthotic prescription
- 3- To fabricate and deliver the orthoses

## B- Students Learning Outcomes (SLOs):

Upon successful completion of this course, students will be able to:

SLOs	1	2	3	4	5	6	7	8	9	10	11	12	13
SLOs of the course													
<b>1. Understand and Apply Patient Assessment Techniques:</b> -Assess patients with various lower extremity pathological conditions, including musculoskeletal, neurological, and congenital disorders. -Utilize appropriate assessment tools and techniques to gather comprehensive patient data, including medical history, physical examination, and biomechanical analysis.					X								
<b>2. Demonstrate Proficiency in Evidence-Based Prescription:</b> - Apply evidence-based principles to formulate appropriate orthotic interventions tailored to individual patient needs and clinical findings. -Interpret relevant research literature and clinical guidelines to support orthotic prescription decisions.													X
<b>3. Execute Clinical Provision of Orthoses:</b> -Implement orthotic interventions effectively, ensuring proper fitting, alignment, and functionality to address patients' biomechanical deficits and functional goals. -Demonstrate proficiency in orthotic adjustment, modification,							X						



and troubleshooting to optimize patient comfort and performance.													
<b>4.Engage in Orthotic Manufacturing Processes:</b> -Acquire fundamental skills in orthotic fabrication techniques, including material selection, pattern making, and thermoforming. - Demonstrate competence in producing custom orthotic devices based on individual patient prescriptions and anatomical requirements.						X							
<b>5.Analyze Complex Cases and Develop Innovative Solutions:</b> -Critically evaluate complex patient cases involving multifaceted orthotic considerations, such as comorbidities, functional limitations, and psychosocial factors. -Apply problem-solving skills to develop innovative orthotic solutions that address the unique needs and challenges presented by complex clinical scenarios.									X				

### **Program PILOs:**

#### **Knowledge**

1. Develop and integrate knowledge from foundational courses to reflect on rehabilitation sciences practice.
2. Demonstrate knowledge of skills, techniques, therapeutic modalities, and contemporary trends in orthotic and prosthetic practice.

#### **Skills**

3. Demonstrate proficiency in communication skills with patients and other healthcare staff.
4. Apply the skills of managing health practice (i.e. prosthetics and orthotics) in different environments and for different patients.

5. Perform appropriate examinations and evaluations of patients, taking into account personal and environmental factors across diverse clinical settings.
6. Develop constructive methods for utilizing the appropriate equipment, materials, components, and technologies in constructing prosthetic and orthotic devices
7. Plan, develop, and implement treatment plans appropriate for each patient according to their age and needs within a broad and continuous series of necessary healthcare treatment plans.

### Competency

8. Compose oral and written communication outputs for clinical and professional purposes and communicate effectively and professionally, both oral and written, with patients, caregivers, and other health professionals within the team.
9. Operate within interprofessional teams of healthcare providers, clients, communities, and organizations in traditional and emerging practices.
10. Apply leadership and management skills to advance Jordan and the global community scientifically, socially, and technologically in orthotics and prosthetic.
11. Illustrate the qualities of a lifelong learner.
12. Apply ethical principles to promote inclusion, participation, safety, and wellbeing for all clients.
13. Demonstrate appropriate competencies in research and evidence-based practice.

### 21. Topic Outline and Schedule:

Week	Lab	Topic	SILOs	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Ref.
1	1	Case 1: Assessment and casting	1,2,3	Face to face	N/A	Synchronous	Attached rubric	1-7
2+3	2+3	Case 1: Positive cast rectification	3,4	Face to face	N/A	Synchronous	Attached rubric	1-7
4	4+5	Plastic draping & Orthotics assembly and Bench alignment	4	Face to face	N/A	Asynchronous	Attached rubric	1-7
6	6	Delivery and family education	1-5	Face to face	N/A	Asynchronous	Attached rubric	1-7
7	7	Mid-term Exam	1-5	Face to face	N/A	Synchronous	Attached rubric	1-7
8	8	Case 2: Assessment and casting	1,2,3	Face to face	N/A	Synchronous	Attached rubric	1-7

9	9	Case 2: Positive cast rectification	3,4	Face to face	N/A	Synchronous	Attached rubric	1-7
10+11	10+11	Plastic draping & Orthotics assembly and Bench alignment	4	Face to face	N/A	Asynchronous	Attached rubric	1-7
12	12	Delivery and family education	1-5	Face to face	N/A	Asynchronous	Attached rubric	1-7
13+14	13&14	Final exam	1-10	Face to face	N/A	Asynchronous	Exam	1-7

## 22Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
<i>Midterm Exam</i>	<i>50</i>	<i>All Topic</i>	<i>All SLOs</i>	<i>Week 7</i>	<i>Face to face</i>
<i>Final exam</i>	<i>50</i>	<i>All Topic</i>	<i>All SLOs</i>	<i>Week 13-14</i>	<i>Face to face</i>

## 23Course Requirements

-Students should have internet connection, a computer and access to e-learning system. All theory lectures are face to face.

-The dress code is light loose clothing that allows for free movement such as training suits or scrubs.

- Each student has to prepare a history taking form, Measurement sheet for ROM and MMT.

- Each test is demonstrated and then students are asked to perform on each other's

- Demonstration videos are available on the course E-learning platform

Please Note that **the lab instructor will not be available during all the rectification labs** so be aware to keep focused, take visually clear position, take notes, ask/ The rectification process will be posted as a demonstration video on the E-learning

## 24Course Policies:

A- Attendance policies:

- Students are expected to be on time.
- Repeated tardiness or leaving early will not be accepted.
- Students who miss class (or any portion of class) are responsible for the content. All classes will be recorded and uploaded on Microsoft Stream. It is the student's responsibility to review the material of classes they missed.

- Attendance will be taken on every class throughout the semester.
- Absence of more than 15% of all the number of classes (**which is equivalent to 3 labs**) requires that the student provides an official excuse to the instructor and the dean.
- If the excuse was accepted the student is required to withdraw from the module.
- If the excuse was rejected the student will fail, the module and mark of zero will be assigned according to the regulations of The University of Jordan.

**B- Absences from exams and submitting assignments on time:**

- The instructor will not do any make-up exams.
- Exceptions for make-up exams and late submission of class assignments will be made on a case-by-case basis for true personal emergencies that are described as accepted by the regulations of UJ (e.g., documented medical, personal, or family emergency).
- It is the student's responsibility to contact the instructor within 24 hours of the original exam time to schedule a make-up exam
- Makeup for the final exam may be arranged according to the regulations of The University of Jordan.

**C- Health and safety procedures:**

- Students will not be in direct contact with patients during this course.
- Modalities will be used in accordance with safety protocols

**D- Honesty policy regarding cheating, plagiarism, misbehavior:**

- Students are expected to observe all University guidelines pertaining to academic misconduct.
- Any work submitted by a student for academic credit must be the student's own work. Submission of work taken directly from another source (e.g., book, journal, internet, or another student work) will be considered plagiarism and the student/group will get a zero grade on that homework. In addition, if copying occurred, both the student who copied the work and the student who gave material to be copied (if applicable) will receive a zero for the assignment.
- Students are expected to do work required for homework on their own. Asking other instructors at JU, staff, or other students to assist in or do any part of the assignment for them will negatively affect their grade on that assignment. The course instructor is the person the student needs to talk to if s/he has any difficulties pertaining to an assignment or project and is strongly encouraged to schedule an appointment with the instructor if such difficulties arise during the semester.
- Course materials prepared by the instructor, together with the content of all lectures and review sessions presented by the instructor are the property of the instructor. Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited.
- Any forms of academic misconduct will be handled according to the University of Jordan guidelines.

**E- Grading policy:**

- Grading for this course will be determined based upon the accumulation of points for variety of assignments and exams.



- All work will be evaluated on completeness, organization, clarity of information, and the integration and application of the material.

**F- Available university services that support achievement in the course:**

- The University of Jordan provides many services to support social, health, and mental well-being of students in general and students with disabilities in specific. Students are advised to visit the Deanship of Students Affairs to learn more about those services.
- If you are a student with a disability for which you may request accommodations, please notify the instructor as soon as possible (email is acceptable) so the appropriate accommodations for this course can be made. Also, notify the staff of Services for Student with Disabilities (Deanship of Students Affairs) as soon as possible.  
The University of Jordan provides internet access for students who request such services. Please contact the Assistant Dean for Student Affairs for such requests.

**25References:**

**A- Required book(s), assigned reading and audio-visuals:**

1. AAOS Atlas of Orthoses and Assistive Devices. Bertram Goldberg, John D. Hsu. 4th edition.
2. Lower Limb Orthotics; Orthotist supplement. New York University.
3. Lower Limb Orthotics; New York University.
4. Clinical anatomy for medical students, (7th Ed.), Snell Richard S.
5. Biomechanics: Principles and Application, Furey, Michael J. "Joint lubrication." (2000).
6. Biomechanics in Clinic and Research. Jim Richards.
7. Orthotics: A comprehensive Clinical Approach. Joan E. Edelstein, 1st edition, SLACK 2002.

**B- Recommended books, materials, and media:**

- Students should have internet connection, a computer and access to Microsoft Teams and the e-learning system. All theory lectures will be given face to face and will be provided at the dashboard of the e-learning system.
- Articles and teaching materials provided by lecturer through the e-learning website

Videos of practical content uploaded on Microsoft Stream, E-learning and YouTube

**26Additional information:**

- This course builds on the knowledge that you have obtained in the Physics, anatomy, Orthopedics, Gait analysis and biomechanics so make sure that you prepare and revise the necessary information.



- This course is highly dependent on the e-learning website so make sure you have access to this platform and you can download the materials and access the lectures.
- If you require any further information, make sure to e-mail the instructor and arrange for a meeting during the announced office hours.

Name of Course Coordinator: <b>-Dr. Amneh Alshawbka</b> -----Signature: <i>Amneh</i>
Head of Curriculum Committee/Department: <b>- Dr. Amneh Alshawbka</b> - Signature: <i>Amneh</i>
Head of Curriculum Committee/Faculty: <b>Prof. Kamal Hadidi</b> Signature: -----
Dean: ----- Signature: -----