

Course Syllabus

1	Course title	Clinical practicum in Upper Extremity Orthotics	
2	Course number	1833240	
3	Credit hours	1	
	Contact hours (practical)	4,0	
4	Prerequisites/corequisites	1833210 or Concurrent	
5	Program title	Bsc in prosthetics and orthotics	
6	Program code	1803	
7	Awarding institution	The university of Jordan	
8	School	Rehabilitation sciences	
9	Department	Prosthetics and orthotics	
10	Course level	2nd year	
11	Year of study and semester (s)	second, first	
12	Other department (s) involved in teaching the course	No	
13	Main teaching language	English	
14	Delivery method	<input checked="" type="checkbox"/> Face to face learning <input type="checkbox"/> Blended <input type="checkbox"/> Fully online	
15	Online platforms(s)	<input type="checkbox"/> Moodle <input type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....	
16	Issuing/Revision Date	September 2023	

17 Course Coordinator:

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Contact hours: 12.00-13.00
Phone number

**18 Other instructors:**

Name: Dr. Mahmoud Al-Fatafta

Office number:

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Contact hours:

19 Course Description:

The aim of this course is to apply theories in practice to derive the appropriate solutions for medical conditions that require upper extremity orthoses. The focus will be on orthoses that are made for patients suffering from neurological, muscular and skeletal conditions. In addition, the students will gain the skills necessary to design and manufacture such orthoses.



20 Course aims and outcomes:

A- Aims:

At the end of the course the students should:

- Determine the classification used for upper extremity orthoses.
- Determine diagnostic indications for upper extremity orthoses.
- Determine the components and functions of upper extremity orthoses
- Describe several static and dynamic splints.
- Understand the purposes for prescribing static and dynamic splints.
- Determine physiologic considerations in static and dynamic splints.
- Determine the basic components and functions of upper limb splints.
- Ability to apply the basic practical skills in splints' modification.
- Distinguish between static and dynamic splints.
- Understand the basic components of upper limb 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
SLOs of the course												
1. Determine the classification used for upper extremity orthoses.	×											
2. Identify the disorders, diseases and injuries which affect the normal function of upper limbs that can be treated/managed by orthoses.	×											

3. Recognize and understand different design of splints.	×												
4. Acquire, in depth, knowledge about types, components and the biomechanical principles related to upper extremity orthoses.							×						

5. Comprehend the basic components of upper limb orthoses	×					×							
6. Employ analytical skills in proper patient examination					×								
7. Distinguish between static and dynamic splints.	×		×										

8. Developing skills in casting, molding, and drapping			x									
9. Learn how to recognize the size of the splint tremline							x					
10. learn how to deal with patient in a professional way		x		x								
11. Dealing congenitally with patient data and personal information.			x	x				x				
12. Illustrate the proper upper limb splint design depends on the upper limb pathology such as arthritis, burn, nerve injury, or trauma.				x								

patient satisfaction.												
13. Delivering high quality health care												
14. Recognizing and work within the limits of their competence and ask for help when necessary				x				x				
15. Respecting the decisions and rights of patients		x		x								

16. Communicate with others within the medical team to improve treatment outcome		x									x	
17. Acquire self-critical appraisals skills				x			x		x			x
18. Acquire the skills of decision making							x					
19. Acquire the skills of identifying what constitute sufficient image quality for orthotic evaluation	x											
Program SLOs:												

1. Apply the knowledge in physical sciences, social sciences, health sciences, culture and natural sciences to prosthetics and orthotics professional-practice. **[application of knowledge]**
2. Communicate efficiently and professionally with patients and other healthcare staff. **[communication skills]**
3. Apply the skills of managing health practice (i.e. prosthetics and orthotics) in different environments and for different patients. **[managing professional practices]**
4. Adhere to social and professional responsibility and ethical behaviors in different environments and scenarios. **[ethical behaviors]**
5. Evaluate patients through conducting appropriate tests. **[patient evaluation]**
6. Create constructive ways to use the appropriate equipment, materials, components and technologies in the building of prosthetics and orthotics devices. **[efficiency in the use of materials].**
7. Create, develop and implement treatment-plans appropriately for each patient according to the age and needs of the patient within a broad and continuous series of necessary health-care treatment-plans. **[planning]**
8. transfer knowledge to users, caregivers, other health professionals, and the public **(knowledge transfer)**
9. Demonstrate appropriate competencies in research and evidence-based practice. **[evidence-based practice]**
10. Demonstrate basic research skills **[conduct a research]**
11. Apply professional team work skills **[group work]**
12. Engage in continues learning activities. **[continuous learning]**

21. Topic Outline and Schedule:

Week	Lecture	Topic	Student Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
1	1	Introduction to splinting Demonstration on casting a cock-up splint	1	Face to Face	NA			1. Splinting manual 2. American academy atlas of orthoses and assistive devices
2	2	Student casting a cock-up splint	2-5	Face to Face	NA		Exam	
3	3	Filling the mold, and starting a demonstration of how to rectify the positive	5,8	Face to Face	NA			American academy atlas of orthoses and assistive devices
4	4	Students to rectify their mold	5,7,8	Face to Face	NA		Exam	
5	5	Plastic drapping	6, 9-13	Face to Face	NA		Exam	American academy atlas of orthoses and assistive devices
6	6	Fabrication of cockup splint; trimlines to follow	6, 14-20	Face to Face	NA		Exam	
7	7	Fitting a splint and riveting with final fabrication						

		process						
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8	8	Mid exam Marks on students work project	6, 9,11,14, 16,17,1 9,20	Face to Face	NA		Exam	
9	9	Project 2: Pattern one	6, 9,11,14, 16,17,1 9,20	Face to Face	NA			American academy atlas of orthoses and assistive devices
10	10	Fitting a splint with marks on students work	6, 9,11,14, 16,17,1 9,20	Face to Face	NA		Exam	
11	11	Project 3: Pattern 2	6, 9,11,14, 16,17,1 9,20	Face to Face	NA			
12	12	Fitting a splint with marks on students work	17-20	Face to Face	NA		Exam	
13	13	Project 3 Pattern3	17-20	Face to Face	NA			
14	14	Fitting a splint with marks on students work	17-20	Face to Face	NA		exam	

22 Evaluation 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
Project one	50	1-6	1-20	7	



Project two	20	12-14	17-20	12-14	
Project three	20	1-14	1-20	15	
Project four	10				

23 Course Requirements

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

24 Course Policies:

A- Attendance policies:

- Students are expected to be on time.
- Tardiness or leaving early will not be accepted.
- Students who miss class (or any portion of class) are responsible for the content. 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 2 labs) requires that the student provides an official excuse to the instructor.
- If the excuse was accepted the student is required to withdraw from the module.
- If the excuse was rejected the student will fail 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.

25 References:

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

- Articles and teaching materials provided by lecturer through the e-learning website.
- Videos of practical content uploaded on Microsoft Stream, E-learning and YouTube.
- AAOS Atlas of Orthoses and Assistive Devices
- The atlas of spinal orthotics

B- Recommended books, materials, and media:

26 Additional information:

- This course is highly dependent on the e-learning website so make sure you have access to it and that you can download the materials and access the lectures.
- This course builds on the knowledge that you have obtained in the Physics, anatomy, fundamentals, orthopedic, pathology, gait analysis, diagnostics, and physiology courses, so make sure that you prepare and revise the necessary information.



- 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: -Reem Massarweh--Signature: -RM Date: -----
Head of Curriculum Committee/Department: - Dr. Bashar Al Qarrot ---- Signature: ----- Bashar ----- -----
Head of Department: Dr. Amneh Al Shawabka ---- Signature: ----- Amneh..SH
Head of Curriculum Committee/Faculty: ----- Signature: ----- -
Dean: ----- Signature: -----