

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 | Clinical practicum in below knee orthoses2 |
|----|--|--|
| 2 | Course number | 1833343 |
| 3 | Credit hours | 1 Practical |
| 3 | Contact hours (theory, practical) | 60 Practical |
| 4 | Prerequisites | Successful completion of 1833243 |
| 5 | Program title | BSc in prosthetics and orthotics |
| 6 | Program code | 3 |
| 7 | Awarding institution | The University of Jordan |
| 8 | School | School of Rehabilitation sciences |
| 9 | Department | Department of prosthetics and orthotics |
| 10 | Course level | Undergraduate |
| 11 | Year of study and semester (s) | 2025/2024, First semester |
| 12 | Other department (s) involved in teaching the course | N/A |
| 13 | Main teaching language | English |
| 14 | Delivery method | \checkmark Face to face learning \Box Blended \Box Fully online |
| 15 | Online platforms(s) | ✓Moodle □Microsoft Teams □Skype □Zoom□OthersN/A |
| 16 | Issuing/Revision Date | Oct 2024 |

17Course Coordinator:

Name: Dr. Amneh Alshawabka

Contact hours: Mon (2-4)

Office number: 428

Phone number: 06/5355000-23226

Email: amneh.alshawbka@yahoo.com



18Other instructors:

Name:

- 1. Miss Farah
- 2. Miss Hadeel Almarzouq
- 3. Miss Shefa Alabadi
- 4. Miss Reem Jaarah

19 Course Description:

This course elaborates on Clinical Practicum in below knee Orthoses course in which students will go through the process of assessing patients on need of below knee orthoses all through until delivery of the orthoses. Students' skills will be further developed and challenged through being the central focus of the course. In particular, students, under distant supervision, will assess, discuss, decide, fabricate and deliver orthoses to patients. Meanwhile, students should show an evidenced based practice all through this process and should be able to defend their choices.

20 Course aims and outcomes:

A- Aims:

- 1- To thoroughly assess patients
- 2- To take AFO negative cast
- 3- To rectify AFO positive cast
- 4- To fabricate AFO
- 5- To formulate orthotic prescription

B- Students Learning Outcomes (SLOs):

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

| | 1 | | | | 1 | | 1 | | | | | |
|--|---|---|---|---|---|---|---|---|---|----|----|----|
| SLOs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| SLOs of the course | | | | | | | | | | | | |
| 1.Patient examination and | X | | | | | | | | | | | |
| assessment | | | | | | | | | | | | |
| 2.Compare and contrast | X | | | | | | | X | | | | |
| strategies for clinical | | | | | | | | | | | | |
| assessment of patients and describe appropriate | | | | | | | | | | | | |
| investigative technique | | | | | | | | | | | | |
| 3.Recognize and describe | | | X | | | | X | | | | | |
| the signs and symptoms of the most common | | | | | | | | | | | | |
| pathologies which require | | | | | | | | | | | | |
| orthotic solutions | | | | | | | | | | | | |
| 4. Recognize and describe the pathological gait | X | | X | | | | | | X | X | | |
| 5.Display ethical practice | X | | | | | X | | | X | | | X |
| when using orthotic | | | | | | | | | | | | |
| treatments by understanding indications, | | | | | | | | | | | | |
| contraindications, and | | | | | | | | | | | | |
| precautions for the use of each orthotic interventions | | | | | | | | | | | | |
| 6.Display critical thinking | | | | X | X | | | | X | | X | |
| skills when critiquing | | | | | | | | | | | | |
| research findings related to | | | | | | | | | | | | |
| | 1 | 1 | | | | I | 1 | | I | I | I | |



| therapeutic benefits of the orthotic interventions | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|--|--|
| 7. Demonstrate the optimal AFO design and alignment | | X | | | | | | | | |
| 8. Formulate an optimal orthotic solution using information from the patient assessment, other members of the rehabilitation team, medical charts, etc. | | | | X | X | X | X | | | |
| 9.Identify, prescribe and justify selection of appropriate materials and componentry in the construction of the device | | | X | | | | | | | |
| 10. demonstrate the optimal trim line of the AFO | | | | X | | | | | | |
| 11. Communicate and discuss patient goals and expectations and discuss and debate the orthotic management with the patient, co-workers and other members of the rehabilitation team. | | X | | | | | | X | | |
| 12. Reliably measure and capture a positive cast or image of patients' appendage while correctly positioning the body part and if appropriate apply the necessary corrective force system | X | | X | | | X | | | | |
| 13. Create the final design of the orthosis through modification of the positive cast and/or tracing of the | X | | X | | | X | X | | | |



| body part or, when indicated, measure and fit prefabricated devices | | | | | | |
|--|---|--|--|--|--|--|
| 14.Communicate effectively with patient, colleagues, and other health care | X | | | | | |

Program SLOs:

1. Application of the knowledge in physical sciences, social sciences, health sciences, culture and natural sciences to prosthetics and orthotics professional-practice. [application of knowledge]

2. Demonstrate proficiency in communication skills 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. Effective use of work-skills in a collaborative /professional environment. [group work]

5. Preference and demonstration of social/professional responsibility as well as ethical behaviors in different environments and scenarios. [ethical behaviors]

6. The ability to conduct appropriate examinations and evaluations of patients of all ages. [patient evaluation]

7. Creating 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].

8. Planning, developing and implementing treatment-plans appropriate 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]

9. Demonstrate, in a systematic and effective manner, the ability to transfer knowledge when providing education to users, care-givers, other health professionals and the public. (knowledge transfer)

10. Demonstrate appropriate competencies in research and evidence-based practice. [evidence-based practice]

11. Demonstrate basic research skills [conduct a research]

12. Actively engage in lifelong learning activities. [continuous learning]



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مركز الاعتماد وضمان الجودة وضمان الجودة

| Week | Lecture | Торіс | Student Learnin g Outcom e | Learning Methods (Face to Face/Blended/ Fully Online) | Platform | Synchronous / Asynchronous Lecturing | Evaluation Methods | Resources |
|------|---------|--|--|--|----------|--|-----------------------|-----------|
| 1 | 1.1 | Case 1: Assessment and casting | 1,2,5 | Face to face | N/A | Synchrono us | Attached rubric | 1-7 |
| 2 | 2.1 | Case 1: Assessment and casting | <i>1,4,6,</i> 7 | Face to face | N/A | Synchron ous | Attache d rubric | 1-7 |
| 3 | 3.1 | Case 1: Positive cast rectification | 1,2,3 | Face to face | N/A | Synchron ous | Attache d rubric | 1-7 |
| 4 | 4.1 | Case 1: Positive cast rectification | 1-5 | Face to face | N/A | Synchron ous | Attache d rubric | 1-7 |
| 5 | 5.1 | Case 1: Orthotics assembly and Bench alignment | 1-5 | Face to face | N/A | Asynchro nous | Attache d rubric | 1-7 |
| 6 | 6.1 | Case 1: Delivery and family education | 1,5,6, 7,8 | Face to face | N/A | Asynchro nous | Attache d rubric | 1-7 |
| 7 | 7.1 | Case 2: Assessment and casting | 1-10 | Face to face | N/A | Synchron ous | Attache d rubric | 1-7 |
| 8 | 8.1 | Case 2: Assessment and casting | 1-10 | Face to face | N/A | Synchron ous | Attache d rubric | 1-7 |
| 9 | 9.1 | Case 2: Positive cast rectification | 1,2,5, 9-12 | Face to face | N/A | Synchron ous | Attache d rubric | 1-7 |



| 10 | 10.1 | Case 2: Positive cast rectification | 1-10 | Face to face | <i>N/A</i> | Synchron ous | Attache d rubric | 1-7 |
|----|------|--|------|--------------|------------|------------------|---------------------|-----|
| 11 | 11.1 | Case 2: Orthotics assembly and Bench alignment | 1-10 | Face to face | N/A | Asynchro nous | Attache d rubric | 1-7 |
| 12 | 12.1 | Case 2: Delivery and family education | 1-10 | Face to face | N/A | Asynchro nous | Attache d rubric | 1-7 |
| 13 | 13.1 | Case 2: Delivery and family education | 1-10 | Face to face | N/A | Asynchro nous | Exam | 1-7 |
| 14 | 14.1 | Final exam | 1-12 | Face to face | <i>N/A</i> | Synchron ous | Exam | 1-7 |

22Evaluation Methods:

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

| Evaluation Activity | Торіс | Mark | SLOs | Period (Week) | Platform |
|---------------------|---------------------------|------|----------|---------------|-----------------|
| | Case 1 | 30 | All SLOs | | Face to |
| First case | Portfolio & Assessment | 10 | All SLOs | Week 1-7 | face |
| | Case 2 | 30 | All SLOs | | Face to |
| Second case | Portfolio & Assessment | 10 | All SLOs | - Week 12-14 | face |
| Final written Exam | All topic | 20 | All SLOs | Week 13 | Face to face |



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 Notes that <u>the lab instructor will not be available during all the rectification labs</u> 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

<u>The student should follow the lab safety rules and instructions and avoid wasting time and</u> <u>materials. Failure to comply</u>:

| 1. | For one time: | The student will be sent an official notice |
|----|----------------|---|
| 2. | For two times: | The student will be official investigated |

3. For three times: The student will be withdrawn from the lab.

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 wellbeing 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.

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مركـز الاعـتماد وضمان الجودة 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: -Dr. Amneh Alshawbka ------Signature: Amneh------

Date : Oct 2024------

Head of Curriculum Committee/Department: - Dr. Amneh Alshawbka - Signature: Amneh Alshawbka

Head of Department: Dr. Amneh Alshawbka Signature: Amneh Alshawbka

Head of Curriculum Committee/Faculty: Prof. Kamal Hadidi Signature: --KAH----

Dean: Prof. Kamal Hadidi Signature: --KAH----