

#### 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 VISION OF THE DEPARTMENT OF PHYSIOTHERAPY

To be recognized as an outstanding educational program with high quality faculty members, staff and students

#### THE MISSION OF THE DEPARTMENT OF PHYSIOTHERAPY

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.

1	Course title	Advanced Neuromuscular Physiotherapy Practice			
2	Course number	1801709			
3	Credit hours (theory, practical)	3 (2, 1)			
	Contact hours (theory, practical)	3 (2, 3)			
4	Prerequisites/corequisites				
5	Program title	Master of Science in Physiotherapy/ Neuromusculoskeletal			
6	Program code	018-01-8			
7	Awarding institution	The University of Jordan			
8	School	The School of Rehabilitation Sciences			
9	Department	Department of Physiotherapy			
10	Level of course	Graduate			
11	Year of study and semester (s)	Year 2, semester 2			
12	Final Qualification	Master of Science in Physiotherapy/ Neuromusculoskeletal			
13	Other department (s) involved in teaching the course	None			
14	Language of Instruction	English			
15	Teaching methodology	□ Face to face learning ■Blended □Fully online			
16	Electronic platform(s)	■Moodle ■Microsoft Teams □Skype □Zoom □Others			
17	Date of production/revision	February 2024			

### **18. Course Coordinator:**

Name: Mayis Aldughmi, PT, PhD Email: <u>m.aldughmi@ju.edu.jo</u> Office hours: Tuesday and Wednesday 12-1 pm in person at my office, or by appointment through email

### **19.** Other instructors:

Name: Maha Mohammad, PT, PhD

Email: maha.tayseer@gmail.com

Office hours: Sunday & Tuesday 1-2 pm in person at my office, or by appointment through Teams chat (Teams account: m\_mohammad)

#### **20. Course Description:**

This course is developed to help students develop their advanced knowledge of the underlying pathophysiology of common neurological conditions across life span; and use that knowledge to inform their advanced clinical practice. The course will provide students with an in depth understanding of the advanced science underpinning impaired motor control, and its clinical context, focusing on the study and treatment of movement disorders.

### 21. Course aims and outcomes:

#### A- Aims:

- 1. Acquire up-to-date knowledge on the physiotherapy management of common neurological conditions.
- 2. Discuss recent research evidence regarding rehabilitation assessment and management for common neurological conditions.
- 3. Where appropriate, learn practical skills in terms of assessment and management for common neurological assessment.

Students Learning Outcomes (SLOs):

### Upon successful completion of this course students will be able to

1		~ ~ ~	~ ~ ~	~ ~ ~	~ ~ ~	~ ~ ~	~ ~ ~
		SLO	SLO	SLO	SLO	SLO	SLO
	SLOs	(1)	(2)	(3)	(4)	(5)	(6)
		Ň	Ì, Í	, ,	, í	Ň	Ň
	SLOs of the course						
Ī	1 Discuss recent research evidence related to	×	×		×		
	the rehabilitation process of common						
	neurological conditions						
	2 Understand the foundations of clinical	×	×		×		
	practice and the impact of aging in						
	neurorehabilitation						
	3 Understand the role of other healthcare	×		×			
	professionals in the rehabilitation process in						
	common neurological conditions						
Ī	4 Learn about Integrating health promotion and	×					
	wellness into neurorehabilitation						

Program SLOs:

1. Develop the skills needed to adopt the evidence-based practice in the field of physiotherapy for neurological and musculoskeletal disorders.

2. Utilize clinical reasoning knowledge and skills to guide assessment, measurement, and providing care to clients with neuromusculoskeletal conditions.

3. Criticize and adopt physiotherapy theories, approaches, and frameworks in the practice of physiotherapy.

4. Build the ability to work and communicate effectively with clients, peers, and healthcare providers.

5. Adhere to the ethical and professional standards in research and clinical practice according to the national and international standards of physiotherapy practice.

6. Develop critical thinking and problem-solving skills to implement research projects that improve clinical practices.

7. Engage in continuous professional development activities.

### 22. Topic Outline and Schedule:

Week	Торіс	Student Learning Outcome	Resources			
1	Introduction to course/ Foundations for Clinical Practice in Neurological Rehabilitation	2	Syllabus/ Lecture slides – Other resources provided by instructor			
2	Blended activity – Asynchronous (non-motor symptoms- research articles)	1,2	Material on Moodle			
3	Aging with chronic nervous system conditions and impairments	1,2	Lecture slides – Other resources provided by instructor			
4	Blended activity – Asynchronous (Exercise recommendations- research articles)	1,2	Material on Moodle			
5	Integrating health promotion and wellness into neurorehabilitation	1,2,4	Lecture slides – Other resources provided by instructor			
6	<i>Guest speaker</i> (OT role + environmental modifications)	1,3	Lecture slides – Other resources provided by instructor			
7	Eid Holiday ©					
8	Advances in stroke management	1,2	Lecture slides – Other resources provided by instructor			
9	Midterm Exam					
10	Blended activity – Asynchronous (Advances in the management of spinal cord injuries)	1,2	Material on Moodle			
11	Advances in the management of spinal cord injuries Project submission	1,2	Lecture slides – Other resources provided by instructor			
12	Blended Activity – Asynchronous (Advances in vestibular rehab)	1,2	Material on Moodle			
13	Wheelchair prescription and fitting	1,2	Lecture slides – Other resources provided by instructor			
14	In-class presentations	1,2	Project summaries			
15		Final Exam				

• Learning methods: Lectures will be held synchronously on-campus face-to-face for one week followed by one week asynchronous blended activity

• Platform: Moodle, Microsoft Teams.

• Evaluation methods: Content learned during lectures will be evaluated during in-class discussions, written assignment, and midterm and final written exams.

### 23. Evaluation Methods and Course Requirements:

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

Evaluation			SLOs		
Activity	Mark	Topic(s)		Period (Week)	Platform
Midterm Exam	30%	Material covered till week 7	1-3	Week 8 (TBD)	Face-to-face
In-class discussion participation*	scussion 10% the course Throughout the se		Throughout the semester	Face-to-face	
Case report (Appendix 1)	20%	Related to the course project	1-6	Week 15	Face-to-face
Final Exam	40%	All course material	1-6	Week 16 (Date to be announced by registrar)	Face-to-face

\*During each class synchronous meeting, students are expected to come prepared to the topic of the week and have read the content assigned by the course instructor. Students will be assigned a grade for participation in each class. Grade will depend on depth of discussion, questions asked, preparation of material, and professional respectful delivery of comments. The final in-class discussion grade will be accumulative for participation in all classes throughout the term.

### 24. Course Requirements

Each student is expected to have a computer, good internet connection, a valid account on Moodle and Microsoft Teams.

Software /programs:

• Microsoft office programs such as power point and word, as well as a PDF reader program.

#### **25. Course Policies:**

#### - Attendance policies:

- Attendance will be taken on every class throughout the semester.
- Students are expected to attend and actively participate in all classes.
- Students are expected to be on time.
- When the student is unable to attend class, it is a courtesy to notify the instructor in advance using either e-mail or phone.
- Repeated tardiness or leaving early will not be accepted.
- Students who miss class (or any portion of class) are responsible for the content. Any student who misses a class has the responsibility for obtaining copies of notes, handouts, assignments, etc. from class members who were present. If additional assistance is still necessary, an

appointment should be scheduled with the instructor. Class time is not to be used to go over material with students who missed class(es).

- An absence of more than 20% of all the number of classes, which is equivalent to 3 classes, 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.

### **B-** Absences from exams and handing in 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.
- It is the student's responsibility to contact the instructor as soon as possible to inform the instructor of the excuse for missing the exam.
- If the excuse was approved, make-up exams will be arranged with the student.
- Late submission of assignments will result in 3 grades deduction per day of delay.

### C- Health and safety procedures:

- If you have any symptom that is flu related you should stay at home (e.g., fever, cough, sore throat).

### 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, clinic forms, or another student work) will be considered plagiarism and the student/group will get a zero grade for that work if part of an assignment. 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.
- If a student submits work that is deemed plagiarized by the course instructors, the student will be reported to the Department's Committee of Higher Education, further disciplinary action will be sought according to the regulations of the University of Jordan.
- Students are expected to do work required for assignments on their own. Asking other instructors at the JU clinic or the 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 staff of Services for Student with Disabilities (Deanship of Students Affairs) as soon as possible. Please also contact the instructor as soon as possible (email is acceptable) so the appropriate accommodations for this course can be made.

## 25. References:

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

Recent research articles and other resources provided by instructors

B- Recommended books, materials and media:

- 1. Shumway-Cook, A. & Woollacott, M. (2016). Motor Control: translating research into clinical practice (5th edition). Baltimore, Maryland: Lippincott Williams & Wilkins.
- 2. O'Sullivan, S. & Schmitz, T. (2021). Improving Functional Outcomes in Physical Rehabilitation (3rd edition). Philadelphia, Pennsylvania: FA Davis.
- 3. Lennon, S., Ramdharry, G., Verheyden, G. (2018). Physical Management for Neurological Conditions (4th edition). Elsevier.
- 4. Umphred, D. A. (2019). Umphred's neurological rehabilitation. St. Louis, Mo: Elsevier/Mosby. Seventh edition
- 5. Neuroscience: Fundamentals for Rehab, Lundy-Ekman, Elsevier, 6th edition

# 26. Additional information:

NA

Name of Course Coordinator: ----Mayis Aldughmi-----Signature: ----MD--- Date: --28/2/2024------Head of Curriculum Committee/Department Dr. Ibrahim Altubasi Signature: Ibrahim Altubasi Head of Department: Dr. Ibrahim Altubasi ------ Signature: Ibrahim Altubasi Head of Curriculum Committee/Faculty: ------ Signature: ----- Signature: ------Dean: ------ Signature: ------

### **Summary and critique of research paper (20% of final grade)**

- You are asked to summarize and critique a systematic review or meta-analysis of interventions for a neurologic condition of your choice.
- Articles need to be approved by the instructor by week 4
- You are responsible for choosing an objective tool of critique
- $\circ$  The assignment consist of 2 parts: written paper and oral presentation
- <u>Written Grading distribution: 15%</u>
  - Clear summary of the article highlighting important aspect 8%
  - Good critique of the article 7%
- The following are required as students prepare the written document:
  - Pages: 2 pages
  - Font: Times New Roman or Ariel
  - o Size: 12
  - $\circ$  Double spaced
  - Research evidence reference style: APA 7<sup>th</sup> edition.
    - Example: Journal Article:
      - Edwards, A. A., Steacy, L. M., Siegelman, N., Rigobon, V. M., Kearns, D. M., Rueckl, J. G., & Compton, D. L. (2022). Unpacking the unique relationship between set for variability and word reading development: Examining word- and child-level predictors of performance. Journal of Educational Psychology, 114(6), 1242–1256. https://doi.org/10.1037/edu0000696
- Oral presentation: 5%
  - You need to prepare a power point presentation to orally present the written part for 15 minutes to your colleagues and course instructors. Presentations will be held in class in the last week of teaching
  - During the presentation you are expected to engage with your colleagues' presentations
  - $\circ$   $\;$  Summaries will be included in the final exam
  - Grading distribution:

Item	Mark
Language Use and Delivery	1
Study rationale and aims clearly discussed	1
Research recommendations clearly discussed	1
Organization and Preparation	1
Responds to questions	1

