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## **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	Scientific writing and inquiry
2	Course number	1801705
3	Credit hours (theory, practical)	3,0
	Contact hours (theory, practical)	3,0
4	Prerequisites/corequisites	-
5	Program title	Master of Science in Physiotherapy – Neuromusculoskeletal thesis and comprehensive tracks
6	Program code	1801
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 1, semester 2
12	Final Qualification	MSc in Physiotherapy
13	Other department (s) involved in teaching the course	-
14	Language of Instruction	English
15	Teaching methodology	<input checked="" type="checkbox"/> Face to face learning <input type="checkbox"/> Blended <input type="checkbox"/> Fully online
16	Electronic platform(s)	<input checked="" type="checkbox"/> Moodle <input checked="" type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....
17	Date of production/revision	February 2024

#### 18. Course Coordinator:

Name: Mayis Aldughmi , PT, PhD

Email: [m.aldughmi@ju.edu.jo](mailto:m.aldughmi@ju.edu.jo)

Office number: 108

Contact hours: Tuesday & Wednesday 12-1 pm in person at my office, or by appointment through email

#### 19. Other instructors:

NA

#### 20. Course Description:

This course provides theoretical tools and practical skills for scientific writing in medical sciences. Students will learn how to organize, document, and practice presenting their data for different audiences. They will also recognize the ethics of medical writing, and decipher publishing procedures for different journals

## 21. Course aims and outcomes:

### A- Aims:

- 1- Be able to recognize the different aspects of scientific writing, including its structure and style, types, and ethical considerations.
- 2- Be able to write in a scientific manner and learn the process through editorial feedback and discussions with instructor and colleagues.
- 3- Be able to present their written work in a concise oral presentation in a professional manner.
- 4- Use electronic resources in the university like research databases to search for appropriate scientific sources such as articles, dissertations, books...etc. To eventually help aid their scientific writing.

### B- Students Learning Outcomes (SLOs):

Upon successful completion of this course students will be able to

SLOs	SLO (1)	SLO (2)	SLO (3)	SLO (4)	SLO (5)	SLO (6)
SLOs of the course						
1 To utilize research database resources to find, analyse, and summarize appropriate material to support a research question or argument in the field of physiotherapy	×	×		×	×	
2 To learn the proper structure and organization of a research scientific paper and thesis proposal using correct English language	×				×	
3 To understand the ethical standards and different research misconduct practices common in scientific writing such as plagiarism and copyright issues				×		
4 To write a concise first draft of a research thesis proposal using correct citations	×	×		×	×	
5 To present and discuss the written scientific paper orally in front of an audience	×	×	×		×	

### 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	Topic	Student Learning Outcome	Resources
1	Introduction to course/ Assignment discussion	-----	Syllabus
2	Scientific writing Basics How to write Title?	1,2	Chapters 1-6- Hofmann Lecture slides In-class activity
3	Ethics in Scientific writing ( <i>Guest speaker</i> )	1,2	Resources provided by the guest speaker
4	How to write Abstract and introduction including problem/ gap <b>Submit assignment #1 before class: Title (section 1 in thesis proposal)</b>	1-5	Chapter 11+15 - Hofmann Online resources/Lecture slides <u>In-class activity</u> (discuss with class title)
5	How to write aims and significance <b>Submit assignment #2 before class: Problem/gap (section 2 in thesis proposal)</b>	1-5	Chapter 22 – Hofmann Online resources/ Lecture slides <u>In-class activity</u> (discuss with class problem and proposal outline)
6	How to write literature review <b>Submit assignment #3 before class: Aims/significance (sections 3-5 in thesis proposal)</b>	1-5	Online resources/ Lecture slides <u>In-class activity</u> (discuss research aims and significance)
7	How to Write the Materials and Methods	1-4	Chapter 12-Hofmann Lecture slides <u>In-class activity</u> (discuss different methods from research papers)
8	How to Cite the References	1-5	Chapter 8- Hofmann Lecture slides <u>In-class activity</u> (discuss Literature review)
9	<b>Midterm Exam</b>		
10	How to Write the results and discussion	1-5	Chapter 13+14 - Hofmann Lecture slides

	<b>Submit assignment #4 before class: Literature review (section 6 in thesis proposal)</b>		<u>In-class activity</u> (discuss Literature review)
11	How to design Tables and Graphs	1-5	Chapter 9- Hofmann Lecture slides <u>In-class activity</u> (discuss research papers)
12	Grant proposals <b>Submit assignment #5 before class: Materials and methods (section 7 in thesis proposal)</b>	1-5	Chapter 20+22- Hofmann Lecture slides <u>In-class activity</u> (discuss materials and methods)
13	Submitting a manuscript	1-4	Chapter 17+18- Hofmann Lecture slides <u>In-class activity</u> (discuss journals related to PT)
14	Posters and presentations Submission of Final assignment draft (Thesis proposal)	5	Chapters 29+30 -Hofmann Lecture slides
15	In-class presentations	5	<u>In-class activity</u> (Discussion of presentations)
16	<b>Final Exam</b>		

- Learning methods: All lectures will be held synchronously on-campus face-to-face.
- Platform: Moodle, Microsoft Teams.
- Evaluation methods: Content learned during lectures will be evaluated during written and oral assignment; 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 Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
Midterm Exam	30%	Material covered till week 8	1-3	Week 9	On campus
Written Assignment	20% 5% for submission on time + 15% written project	Related to the course material as a whole	1-4	1 <sup>st</sup> part: week 4 2 <sup>nd</sup> part: week 5 3 <sup>rd</sup> part: week 6 4 <sup>th</sup> part: week 10 5 <sup>th</sup> part: week 12 Final draft: week 14	Submitted as a word document via email: <a href="mailto:m.alduhmi@ju.edu.jo">m.alduhmi@ju.edu.jo</a>
Oral presentation	10%	Related to the course project	1-5	Week 15	On campus
Final Exam	40%	All course material	1-3	Week 16 (Date to be announced by registrar)	On campus

### Project description:

#### Written Paper (20%):

Students are required to write a full thesis proposal using the thesis proposal template required by the graduate school of the University of Jordan (Refer to Appendix A). Each section of the proposal will be submitted separately throughout the semester. Submission should be made before the class on the weeks provided in the topics table. The course instructor will provide feedback for every section submitted and each section will also be discussed in class.

#### Submission requirements

Each student will submit five mini assignments (sections of the proposal) throughout the semester before submitting the final thesis proposal towards the end of the semester (**Check topics timetable for submission deadlines**). **If the student did not submit the assignment according to the timetable, one mark will be deducted (Total 5%).** Mini assignments are as follows:

- 1) Title
- 2) Problem and gap
- 3) Aims and significance
- 4) Background/ Literature review
- 5) Materials and Methods

Each section should be written as follows:

- Font: Times New Roman or Ariel
- Size: 12
- Double spaced
- 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>

Rubric for written proposal. Total 15%:

Item	Mark
Title clear	1
Research problem and gap clear (explained sufficiently)	3
Aims explained with relevant hypotheses	2
Significance section is relevant to study aims with clear clinical implications	2
Literature review relevant to study aims and explained in detail	2
Methodology relevant to study with clear details	3
Style, Formatting, Citations, Grammar, Sentence Structure, Punctuation, and Word Choice	3

Oral presentations (10%):

The students need to prepare a power point presentation to orally present their written proposal for 15 minutes to their colleagues and course instructor. Presentations will be held in class in the last week of teaching.

Rubric for oral presentation. Total 10%

Item	Mark
Language Use and Delivery	2
Study rationale and aims clearly discussed	2
Research methodology clearly discussed	3
Organization and Preparation	2
Responds to questions	1

## 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.
- EndNote (or alternative literature citation program).

## 25. Course Policies:

### - Attendance policies:

- Attendance will be taken periodically 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 15% of all the number of classes, which is equivalent of 2 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 and mark of zero will be assigned as suggested by the laws and regulations of the University of Jordan. Please refer to pages 133, 134 of the student handbook.

### 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 (e.g., documented medical, personal, or family emergency).
- Make-up exams will be arranged if justifications for missing the exam satisfy the above. It is the student's responsibility to contact the instructor within 24 hours of the original exam to schedule a make-up session. A make-up exam should be taken within a week from the original exam date, unless the student can provide documentation that makes meeting that deadline impossible; otherwise, the recorded score for that exam for the student will be a zero.
- Late assignments will not be accepted and submission of assignments (due to unjustified absence from class) by other students will not be accepted regardless of how much work the student put into its preparation.

### C- Health and safety procedures:

- Students will not be in direct contact with patients during this course.

### 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., research papers, artificial intelligence, book, journal, internet, clinic forms, 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.

- 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 well-being of students in general and students with disabilities in specific. Students are advised to visit the Faculty 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 (Faculty 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:**

Scientific Writing and Communication: Papers, Proposals, and Presentations. Angelika H. Hofmann. Oxford University Press, 5th edition

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

1. Matthews, J. R., & Matthews, R. W. (2014). Successful scientific writing: a step-by-step guide for the biological and medical sciences. Cambridge University Press.
2. Hilary Glasman-deal - Science Research Writing\_ A Guide for Non-Native Speakers of English- Imperial College Press (2009)
3. How to Write and Publish a Scientific Paper, 8th Edition. Barbara Gastel, Robert A. Day · 2016.

4. Lang, T. A. (2010). How to write, publish, and present in the health sciences. ACP Press.
5. How Not to Write a Thesis or Dissertation: A Guide to Success through Failure By Mikael Sundström
6. <https://www.scribbr.com/dissertation/literature-review/>
7. <https://writing.colostate.edu/guides/guide.cfm?guideid=83>
8. <https://www.coursera.org/courses?query=scientific%20writing>
9. <http://graduatedstudies.ju.edu.jo/ar/arabic/Regulations%20and%20instructions/Forms/List.aspx>

## 26. Additional information:

NA

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

## Appendix A

### Thesis Proposal Template

أ. العنوان باللغة العربية (يكتب طباعة):

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ب. العنوان باللغة الإنجليزية/ أخرى (يكتب طباعة):

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مشكلة الدراسة وأهميتها وأهدافها:

(يعطى الطالب فكرة عن موضوع الدراسة والأساس النظري الذي تقوم عليه والأسئلة أو الفرضيات التي ستحاول الدراسة الإجابة عليها ثم يبرز أهمية الدراسة ومبرراتها ).

مشكلة الدراسة:

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أهمية الدراسة:

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أهداف الدراسة:

اسئلة او فرضيات الدراسة:

الدراسات السابقة :

(يعرض الطالب عينة من الدراسات السابقة ذات العلاقة بموضوع البحث مباشرة وما يميز دراسته عن الدراسات الأخرى) 0

**ملاحظة:** يمكن استعمال صفحات إضافية لهذا الجزء.

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**ملاحظات أخرى:** (تقتضيها طبيعة البحث).

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**المصادر والمراجع:**

(يضع الطالب المصادر والمراجع التي يعتمد عليها في مخطط الرسالة تبعاً لاسلوب التوثيق المعتمد من كلية الدراسات العليا).

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