

Course Syllabus

1	Course title	Scientific Research Methodology
2	Course number	0603793
3	Credit hours (theory, practical)	1
	Contact hours (theory, practical)	1
4	Prerequisites/corequisites	
5	Program title	MSc. in Human Nutrition and Dietetics
6	Program code	036
7	Awarding institution	University of Jordan
8	School	Agriculture
9	Department	Nutrition and Food Technology
10	Level of course	Second
11	Year of study and semester (s)	2020/2021, Fall semester
12	Final Qualification	
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	11/10/2020

16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed.

Prof Reema Tayyem, 11-12 (Sunday, Monday, Thursday), email: r.tayyem@ju.edu.jo

17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.

None

18. Course Description:

As stated in the approved study plan.

Study of the basics of scientific research; identification of research problem; formulation of its hypothesis, data collection and statistical analysis; ethics in scientific research; training in writing a research proposal.

19. Course aims and outcomes:

<p>A- Aims: At the end of this course the student should be able to:</p> <ul style="list-style-type: none"> • Understand some basic concepts of research and its methodologies • Identify and distinguish between the various types of research used in different sciences and explain their use • Identify appropriate research topics • Select and define appropriate research problem and parameters • Prepare a project proposal (to undertake a project) • Organize and conduct research (advanced project) in a more appropriate manner • Write a research report and thesis • Write a research proposal (grants) <p>B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to</p>
<p>A. Knowledge and Understanding: Student is expected to</p> <ul style="list-style-type: none"> A1- Define the concepts of research A2- Understand the need for research A3- Understand types of research A4- Know the research ethics
<p>B. Intellectual Analytical and Cognitive Skills: Student is expected to</p> <ul style="list-style-type: none"> B1- Be able to formulate the problem. B2- Be able to identifying variables B3- Be able to differentiate between quantitative data analysis and qualitative data analysis
<p>C. Subject- Specific Skills: Students is expected to:</p> <ul style="list-style-type: none"> C1- How to carry out a literature review C2- How to write a research report C3- Know the contents of a thesis C4- How to write good research proposals
<p>D. Transferable Key Skills: Students is expected to</p> <ul style="list-style-type: none"> D1- Present the topic orally using different audio-visual aids in the area of public speaking. D2- Be able to express opinion, ideas and proposals in strong and confident way.

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
<p>Overview of Research and its Methodologies –</p> <ul style="list-style-type: none"> - Concepts of research - The need for research - Types of research - Steps in conducting research - Research ethics - 	1-5	Reema Tayyem	A, B, C,D	1-4	1-3

Literature review - What is literature review? - Why the need for literature review? - How to carry out a literature review?	6-9	Reema Tayyem	A, B, C	1-3	1-6
Selecting and defining a research problem - Problem formulation – why the need for this? - What are the criteria for selecting a problem? - Identifying variables - Evaluating problems - Functions of a hypothesis - Quantitative data analysis - Qualitative data analysis	10-12	Reema Tayyem	A, B, C,D	1-6	1-6
Writing Research Reports and Thesis - Why the need to write papers and reports? - Writing a research report - Contents of a thesis	13	Reema Tayyem	A, B, C,D	1-6	1-6
Writing Research Proposals - Why do we need to write research proposals? - Research Grants in Jordan - How to write Good Research Proposals? - Case Study	14	Reema Tayyem	A, B, C,D	1-6	1-3

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:	
Additionally different aids were used to facilitate and illustrate teaching such as	
ILO/s	Learning Method
A. Knowledge and Understanding (A1-A..)	Brain storming
B. Intellectual Analytical and Cognitive Skills (B1-B..)	Group discussion
C. Subject Specific Skills (C1-C....)	Watching videos and self-reading hand-outs.
D. Transferable Key Skills (D1-D3...)	Present a review or study

22. Evaluation Methods and Course Requirements:

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

ILO/s	Evaluation Method
A. Knowledge and Understanding (A1-A..)	Med- and final exam
B. Intellectual Analytical and Cognitive Skills (B1-B..)	Project and assignments
C. Subject Specific Skills (C1-C....)	Project
D. Transferable Key Skills (D1-D3...)	Assignments

23. Course Policies:

A- **Attendance policies:** As declared by The University of Jordan Laws and Regulations.
B- **Absences from exams and handing in assignments on time:** As declared by The University of Jordan Laws and Regulations.
C- **Health and safety procedures:** None
D- **Honesty policy regarding cheating, plagiarism, misbehavior:** As declared by The University of Jordan Laws and Regulations.
E- **Grading policy:** As shown Evaluation Methods and Course Requirements
F- **Available university services that support achievement in the course:** Data show projector and class

24. Required equipment: (Facilities, Tools, Labs, Training....)

Data show projector, internet connection and class.

25. References:

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

1. Bacon-Shone, JH. Introduction to Quantitative Research Methods. Hong Kong: Graduate School, The University of Hong Kong. 2013
2. Kumar, Ranjit. Research Methodology - A step-by-step Guide for Beginners. 2nd Ed. London: SAGE Publications. 2011
3. Bruce, Christine. Developing Students' Library Research Skills. HERDSA Green Guide # 13,1992.

Recommended books, materials, and media:

4. *Up-to-date scientific* articles, reviews and meta-analysis will be used.
5. *Position and practice papers.*
6. Other resources.

26. Additional information:

Name of Course Coordinator: -----Signature: ----- Date: -----

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----