Course plan

Year: 2025	**Semester:** ■ First, ☐ Second, ☐ Summer	**Number of students: 12**
Major: Medical immunology	■ Basic sciences, ☐ Physiopathology	**Department:** Immunology
Course Title: Research method	■ Theoretical, ☐ Practical	**Credit:** **Code N.:** 1221057
Prerequisite:	**Day & Time:** Tuesday & 8-10	**Course type:**
Instructor: DR. Pordel	**Office address:**	**Tel:** 09171747335
Email: safoora.pordel@gmail.com	**Response Hours and Days:**	**Student representative name and mobile number:**

Main objective: At the end of the course, students should be familiar with the concepts of scientific research and the steps involved in conducting it, and be able to design a scientific proposal..

On completion of this course, the student will be:

1. Become familiar with the methods of reaching scientific truth (from hypothesis formulation to scientific principle), the stages of conducting research, and how to select the research topic or title and its sources.
2. Become familiar with the types of research (applied, fundamental, etc.) and the difference between research and theory, concepts, and types of research methodologies (types of studies in medical sciences).
3. Become familiar with the concept of society, sample, types of sampling methods, and sample size estimation.
4. Become familiar with the generalities of research, step one (statement of the problem, its structure and writing method, scientific and literary considerations in writing the problem statement), the importance of research, scientific and practical definition of concepts, and generalities of writing a research proposal.
5. Become familiar with the generalities of research, step two (definition of general objectives and their difference with the research title, sub-objectives, importance and method of formulating specific objectives, hypothesis, and research question).
6. Become familiar with data collection methods and tools (using existing information, observation, testing, interviews, questionnaires, etc.), their characteristics, and validity and reliability.
7. Become familiar with the general principles of quantitative and qualitative data analysis and their interpretation, and the method of selecting statistical tests.
8. Learn how to write a research proposal and thesis.

References (Text books):

1- - Research reference book, Authors: A group of authors led by Dr. Hamid Ghasemi, Andishe Ara Publications, latest edition
2- - Recent reputable articles

Student evaluation and the value related to each evaluation:

(The assessment tools that will be used to test student ability to understand the course material and gain the skills and competencies stated in learning outcomes)

ASSESSMENT TOOLS	**From**
Assignments	10
Quiz	-
Presence in online courses	-
Midterm Exam	-
Final Exam (Written exam)	10
TOTAL MARKS	**20**

Students responsibilities:

1- 1- Mobile phones must be turned off during class or exams.
2- 2- Attending class on time
3- 3- It is necessary for the student to attend all class hours. Unexcused absence during the course will result in a grade deduction.

Discipline and educational rules:

1- It is applied according to the regulations of the educational regulations.

Mid exam date: **Final exam date:**

Row	date	Time	Topic	Professor	References	Chapter	Pages
1	October/07	8-10	Methods of reaching scientific truth (from hypothesis formulation to scientific principle), stages of conducting research, and how to select a research topic or title and its sources.	Dr.Pordel	Research reference book		
2	October/14	10-12	Types of research and the difference between research and theory, concepts and types of research methodologies (types of studies in medical sciences)	Dr.Pordel	Research reference book		
3	October/21	10-12	Familiarity with the concept of population, sample, types of sampling methods and sample size estimation	Dr.Pordel	Research reference book		
4	October/28	10-12	Generalities of research, first step (problem statement, structure and writing method, scientific and literary considerations in writing the problem statement), importance of research, scientific and practical definition of concepts, generalities of writing a research proposal	Dr.Pordel	Research reference book		
5	November/04	10-12	Research overview, second step (definition of general objectives and their difference from the research title, sub-objectives, importance and method of	Dr.Pordel	Research reference book		

			formulating specific objectives, hypothesis and research question)				
6	November/11		Data collection methods and tools (using existing information, observation, experiment, interview, questionnaire, etc.), their characteristics and validity and reliability	Dr.Pordel			
7	November/18	10-12	Quantitative and qualitative data analysis and their interpretation, how to choose statistical tests	Dr.Pordel	Research reference book		
8	November/25	10-12	How to write a research proposal and thesis	Dr.Pordel	Research reference book		