

# Course Description Template: Research Methods

<b>1. Course Name:</b>	
<b>Scientific Research Methods</b>	
<b>2. Course Code:</b>	
<b>WBA-41-06</b>	
<b>3. Semester/Year:</b>	
<b>First Course</b>	
<b>4. Date of preparation of this description:</b>	
<b>15/9/2025</b>	
<b>5. Available Forms of Attendance:</b>	
<b>My presence</b>	
<b>6. Number of Hours (Total) / Number of Units (Total):</b>	
<b>2 Hours / 2 Units</b>	
<b>7. Course Administrator Name</b>	
<b>Name: Eng. Ali Aziz Kalkawi</b> Email: <a href="mailto:ali.aziz.kelkawi@uowa.edu.iq">ali.aziz.kelkawi@uowa.edu.iq</a>	
<b>8. Course Objectives</b>	
<ul style="list-style-type: none"> <li>✓ Introducing the student to the basic concepts of scientific research, its characteristics, and its importance in the advancement of human thought.</li> <li>✓ Providing the student with the necessary skills to apply the methodological steps to prepare an integrated scientific research, starting from identifying the problem and ending with writing the results.</li> <li>✓ Enable the student to distinguish between different types and methods of scientific research and choose the appropriate approach for a specific research problem.</li> <li>✓ Training the student to write a brief and applied scientific research, while adhering to the technical and material foundations of writing research.</li> <li>✓ Developing the student's critical and analytical thinking skills and</li> </ul>	<p><b>Course Objectives</b></p>

qualifying him to discuss and defend research.					
<b>9. Teaching and Learning Strategies</b>					
<ul style="list-style-type: none"> <li>✓ Theoretical lectures to explain concepts and methodological steps.</li> <li>✓ Classroom discussions and brainstorming to develop research ideas.</li> <li>✓ Practical workshops for training on each step of the research preparation.</li> <li>✓ A research project (short research) that the student prepares during the semester.</li> </ul>					<b>Strategy</b>
<b>10. Course Structure</b>					
Evaluation Method	Learning Method	Name of Unit or Topic	Required Learning Outcomes	Hours	Week
Daily exams	Lecture + Discussion	Introduction, Concept and Characteristics of Scientific Research, Motivations for Conducting Research.	Understand the nature and importance of scientific research.	4	1-2
Participation and Attendance	Lecture + Discussion	Qualities of a researcher and the requirements of good research.	Identify the basic characteristics of a successful researcher.	2	3
<b>First Month Exam</b>	Lecture + Examples	Types of Scientific Research, Methods and Classifications.	Distinguish between different types and methods of scientific research.	4	4-5
Student Activity	Lecture + Workshop	Steps to prepare the research (identifying the problem, formulating hypotheses, previous studies).	Apply the first steps to prepare the research plan.	6	6-8
Daily exams	Lecture + Practical Training	Steps to prepare the research (continued) (theoretical framework, research methodology).	Understand how to build the theoretical and practical framework of the research.	4	9-10
Participation and Attendance	Lecture + Examples	The final form of the research, the language and method of the research.	Proficiency in writing the research in the required final form.	2	11
<b>Second Month Exam</b>	Lecture + Practical Training	The physical and technical form of the research (footnotes, documentation, references).	Adherence to the technical and material standards of the research.	2	12

Student Activity	Workshop + Simulation	Research discussion.	Acquire the skills of presenting and discussing research results.	2	13
Participation and Attendance	Lecture + Office Visit	Information resources in libraries.	Learn how to access reliable sources.	2	14
Final exam	Writing / Attendance	<b>Final exam.</b>	A comprehensive assessment of the student's understanding of the scientific research methodology.	2	15

### 11. Course Evaluation

**Distribute the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, and written exams, and reports..... etc**

- A. Daily, Surprise and Oral Exams: 10
- B. Student Activities (Reports, Research, Participation): 10 marks
- c. Monthly exam (two months): 30 marks
- d. Final Exam: 50

**Total = 100 Marks**

### 12. Learning and Teaching Resources

**Scientific Research Methods** (Third Edition) - Prof. Muhammad Sarhan Ali Al-Mahmoudi  
**2. Fundamentals of Scientific Research** (First Edition) - Dr. Munther Abdel Hamid Al-Damen.

**Required Textbooks**