

## **Course Description 2025-2026**

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| <b>1.Course Name:</b>   |
| Epidemiology  |
| <b>2.Course Code:</b>   |
| <b>Course Description 2025-2026</b>   |
| <b>3.Semester / Year:</b>   |
| Fourth Stage/First Semester   |
| <b>4.Description Preparation Date:</b>                                      |
| 20/9/2025   |
| <b>5.Available Attendance Forms:</b>  |
| In-person lectures (attendance forms)                                       |
| <b>6.Number of Credit Hours (Total) / Number of Units (Total)</b>           |
| (2) hours Weekly Of (15) weeks. Theory (30) hrs.                            |
| <b>7.Course administrator's name (mention all, if more than one name)</b>   |
| Name: Murtadha Ghanim Aday  |
| Email: <a href="mailto:murtadha.gh@uowa.edu.iq">murtadha.gh@uowa.edu.iq</a> |

## 8. Course Objectives

- Understand the basic concepts and theories of epidemiology.
- Explain the natural history of diseases and the different types of diseases and their methods of transmission.
- Describe the methods of preventing diseases and their occurrence or transmission.
- Discuss the concepts of epidemiological surveillance and the incubation period for diseases.
- Differentiate between the epidemiology of communicable and non-communicable diseases.
- Explain the various measurement tools used in epidemiology.
- Understand the principles of risk studies and the different methods of epidemiological studies.
- Develop skills in designing epidemiological studies and applying statistical methods for data analysis.
- Acquire data analysis skills to make informed decisions and develop health policies.
- Apply epidemiological principles and methods to nursing and public health practice.

## 1. Teaching and Learning Strategies

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| Strategy | - Theoretical lectures.<br>- Discussions.<br>- Reports.<br>- Seminars. |
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## 2. Course Structure

| Week | Hours | Required Learning Outcomes | Unit or subject name | Learning method | Evaluation method |
|------|-------|----------------------------|----------------------|-----------------|-------------------|
|------|-------|----------------------------|----------------------|-----------------|-------------------|

|                             |                            |  |   |                            |  |
|-----------------------------|----------------------------|--|---|----------------------------|--|
| 1                           | 2T                         | <input type="checkbox"/> Define the basic concepts and principle of epidemiology.<br><input type="checkbox"/> Understand the importance of epidemiology in the field of nursing and public health. | Introduction to Epidemiology              | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 2                           | 2T                         | Explain the various theories and models in epidemiology.   | Epidemiology Theories                     | - Lectures.<br>- seminars. | Quizzes, students' participation in the lecture, evaluation. |
| 3                           | 2T                         | Describe the natural history and progression of diseases.  | Natural History of Diseases               | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 4                           | 2T                         | Differentiate between the types of diseases and their methods of transmission.   | Types of Diseases and Transmission        | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 5                           | <b>Mid-term exam. No 1</b> |  |   |                            |  |
| 6                           | 2T                         | Identify the methods for preventing diseases and their occurrence or transmission.   | Disease Prevention and Control            | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 7                           | 2T                         | Understand the concepts and importance of epidemiological surveillance.  | Epidemiological Surveillance              | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 8                           | 2T                         | Explain the concept of incubation period for diseases.   | Incubation Period                         | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 9                           | 2T                         | Discuss the epidemiology of communicable diseases.   | Epidemiology of Communicable Diseases     | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 10                          | <b>Mid-term exam. No 2</b> |  |   |                            |  |
| 11                          | 2T                         | Discuss the epidemiology of non-communicable diseases.   | Epidemiology of Non-Communicable Diseases | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 12                          | 2T                         | Identify the various measurement tools and techniques used in epidemiology.  | Measurement Tools in Epidemiology         | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 13                          | 2T                         | Understand the principles and applications of risk studies in epidemiology.  | Risk Studies                              | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| 14                          | 2T                         | Describe the different methods and approaches used in epidemiological studies.   | Epidemiological Study Methods             | -Lectures.<br>- seminars.  | Quizzes, students' participation in the lecture, evaluation. |
| <b>3. Course Evaluation</b> |                            |  |   |                            |  |
| Evaluation                  |                            |  |   |                            | Score standard   |
| <b>Formative</b>            |                            | <b>Summative</b>   |   |                            | -Excellent (90-100)  |
| <b>Scores</b>               | <b>Evaluation methods</b>  | <b>Scores</b>  | <b>Evaluation methods</b>                 |                            |  |

|     |               |     |                                 |   |
|-----|---------------|-----|---------------------------------|---|
| 4%  | Daily Quizzes | 10% | First-Mid-term theoretical exam | -Very Good (80-less than 90)<br>-Good (70-less than 80)<br>-Fair (60-less than 70)<br>-Acceptable (50-less than 60)<br>-Fail (less than 50) |
| 2%  | Seminars      | 10% | Second-midterm exam             |   |
| 2%  | Reports       | 70% | Final theoretical exam          |   |
| 2%  | Participation |     |                                 |   |
| 10% |               | 90% |                                 |   |

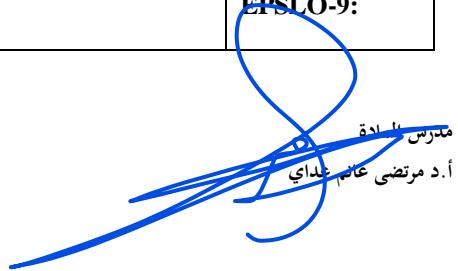
#### 4. Learning and Teaching Resources

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|---------------------------------|---|
| Required textbooks              | <p>"Epidemiology" by Leon Gordis (6th Edition, 2019), Elsevier, ISBN: 978-0-323-55159-4</p> <p>"Epidemiology for Public Health Practice" by Robert H. Friis and Thomas A. Sellers (5th Edition, 2013), Jones &amp; Bartlett Learning, ISBN: 978-1-4496-3468-3</p> <p>"Principles of Epidemiology in Public Health Practice" by Centers for Disease Control and Prevention (CDC) (3rd Edition, 2012)</p>   |
| Electronic References, Websites | <ul style="list-style-type: none"> <li>World Health Organization (WHO) Epidemiology website: <a href="https://www.who.int/topics/epidemiology/en/">https://www.who.int/topics/epidemiology/en/</a> May 23, 2023</li> <li>Centers for Disease Control and Prevention (CDC) Epidemiology and Prevention website: <a href="https://www.cdc.gov/epidemiology/index.html">https://www.cdc.gov/epidemiology/index.html</a> May 23, 2023</li> <li>Epidemiology and Health Informatics (EHI) Journal: <a href="https://www.ejhi.net/">https://www.ejhi.net/</a> May 23, 2023</li> <li>Journal of Epidemiology and Community Health (JECH): <a href="https://jech.bmjjournals.com/">https://jech.bmjjournals.com/</a></li> </ul> |

| End of program student learning outcomes (EPSLO)  | Course Learning outcomes  | the Link to EPSLO  |
|---|---|--|
| <b>Knowledge EPSLO-1:</b><br><b>Demonstrate the highest level of understanding and awareness of the scientific related to the nursing profession</b>                                      | • Understand the basic concepts and theories of epidemiology.   | <b>EPSLO-1:</b>  |
| <b>EPSLO-2:</b><br><b>Engage in lifelong learning and self-development</b> to continuously improve nursing practice.  | • Explain the natural history of diseases and the different types of diseases and their methods of transmission.  | <b>EPSLO-5:</b><br><b>EPSLO-6:</b>   |
| <b>EPSLO-3:</b><br><b>Integrate pathophysiological and psychosocial knowledge to design advanced, individualized care plans for patients with complex and multi-system health needs.”</b> | <ul style="list-style-type: none"> <li>• Describe the methods of preventing diseases and their occurrence or transmission.</li> <li>• Discuss the concepts of epidemiological surveillance and the incubation period for diseases.</li> <li>• Differentiate between the epidemiology of communicable and non-communicable diseases.</li> <li>• Explain the various measurement tools used in epidemiology.</li> </ul> | <b>EPSLO-3:</b><br><b>EPSLO-4:</b><br><br><b>EPSLO-3:</b><br><b>EPSLO-7:</b> |

|  |   |                           |
|--|---|---------------------------|
| <b>EPSLO-4</b><br><b>Utilize evidence-based research and advanced clinical judgment to improve patient care strategies and achieve the best clinical and psychosocial outcomes for individuals with complex health conditions.</b> | <ul style="list-style-type: none"> <li>Understand the principles of risk studies and the different methods of epidemiological studies.</li> </ul>         | <b>EPSLO-4: EPSLO-10:</b> |
|  | <ul style="list-style-type: none"> <li>Develop skills in designing epidemiological studies and applying statistical methods for data analysis.</li> </ul> | <b>EPSLO-3: EPSLO-8:</b>  |
| <b>Values</b>  | <ul style="list-style-type: none"> <li>Develop skills in designing epidemiological studies and applying statistical methods for data analysis.</li> </ul> | <b>EPSLO-3: EPSLO-7:</b>  |
| <b>EPSLO-8:</b><br>Demonstrate respect for patient diversity, cultural values, and individual beliefs when providing nursing care.   | <ul style="list-style-type: none"> <li>Acquire data analysis skills to make informed decisions and develop health policies.</li> </ul>                    | <b>EPSLO-5: EPSLO-6:</b>  |
| <b>EPSLO-9:</b><br>Exhibit a professional attitude of integrity, accountability, and empathy by embracing holistic, patient-centred care.  | <ul style="list-style-type: none"> <li>Apply epidemiological principles and methods to nursing and public health practice</li> </ul>                      | <b>EPSLO-3: EPSLO-9:</b>  |
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رئيس الفرع  
م.د علي عون جبر



مدرس بالا امداد  
أ.د. مرتضى عاصم عدلي