

**Al-Zahrawi University**

**College of Pharmacy**



**Higher Education Institution Performance Review  
(Academic Program Review)**

This course description provides a summary of the main characteristics of the course and the learning outcomes expected of the student, demonstrating whether he has made the most of the learning opportunities available and must be linked to the program description.

|                                                                                                                                                                                                                                                                                                                                    |                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1. Educational Institution                                                                                                                                                                                                                                                                                                         | Al-Zahrawi University                 |
| 2. University Department / Center                                                                                                                                                                                                                                                                                                  | Pharmacy College                      |
| 3. Course Name / Code                                                                                                                                                                                                                                                                                                              | Pharmacoeconomics – Theory<br>PCPC 56 |
| 4. Programs in which it is included                                                                                                                                                                                                                                                                                                | Bachelor in Pharmacy                  |
| 5. Available Forms of Attendance                                                                                                                                                                                                                                                                                                   | Daily Attendance                      |
| 6. Semester / Year                                                                                                                                                                                                                                                                                                                 | Second Semester - 5th year            |
| 7. Total Number of Study Hours                                                                                                                                                                                                                                                                                                     | 30 hours (2 hours per week)           |
| 8. Date of preparing this description                                                                                                                                                                                                                                                                                              | 2025-2026                             |
| 9. Course Objectives : Knowing the relationship between Pharmacoeconomics and Clinical Pharmacology, explaining how to obtain the best medicine at the most appropriate price, scientific methods for analyzing the cost of medicine, and how to make decisions to purchase medicines and medical supplies in a scientific manner. |                                       |
| 10. Learning Outcomes, Teaching and Learning Methods, and Evaluation                                                                                                                                                                                                                                                               |                                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>A. Knowledge and Understanding</b></p> <p>A-1 The student should be familiar with the relationship between pharmaceutical economics and clinical pharmacy.</p> <p>A-2 The student should be familiar with the statement of how to obtain the best medicine at the most appropriate price.</p> <p>A-3 The student should be familiar with how to conduct an economic feasibility study.</p> <p>A-4 The student should be familiar with the scientific methods for analyzing the cost of medicine.</p> <p>A-5 The student should be familiar with how to make decisions to purchase medicines and medical supplies in a scientific manner.</p> <p>A-7 Preparing trained and qualified pharmacists to work in pharmaceutical institutions.</p> |
| <p><b>B. Subject-Specific Skills</b></p> <p>B 1. Teaching skill in the subject of pharmaceutical economics.</p> <p>B 2. The student should have the ability to infer and link clinical and economic information together.</p> <p>B 3. The student should have the ability to link medicines to the practical economic reality in pharmacies and hospital.</p>                                                                                                                                                                                                                                                                                                                                                                                     |
| <p><b>Teaching and Learning Methods</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>1. Thinking and discussion method.</p> <p>2. Scientific tests.</p> <p>3. Learning by exploratory lecture.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p><b>C. Evaluation Methods</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p>1. Submit weekly reports.</p> <p>2. Exam grades.</p> <p>3. Graduation research</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p><b>D. Thinking Skills</b></p> <p>A1. Student-teacher dialogue method.</p> <p>A2. Preparing weekly reports.</p> <p>A3. Conducting discussions of the results.</p> <p>A4. Exploratory thinking.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>Teaching and Learning Methods</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>1. Grades.</p> <p>2. Discussion and dialogue.</p> <p>3. Tests.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p><b>Evaluation Methods</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>Grades, research and reports, tests</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p><b>e. General and Transferable Skills</b></p> <p>D 1. The student is able to employ the knowledge he has received.</p> <p>D 2. The student is able to master the teaching and learning profession.</p> <p>D 3. The student is able to embody what he has acquired in professional development.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| 11. Course Structure            |                                               |                                                                           |                           |      |      |
|---------------------------------|-----------------------------------------------|---------------------------------------------------------------------------|---------------------------|------|------|
| Evaluation Method               | Learning Method                               | Unit Name / Course or Topic                                               | Required Learning Outcome | Hour | Week |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Course overview, Changes in health care delivery                          | Knowledge                 | 2    | ١    |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | overview of Pharmacoeconomics                                             | Knowledge                 | 2    | ٢    |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Cost determination. Evaluation of outcomes and effectiveness              | Knowledge                 | 2    | ٣    |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Cost minimization analysis (CMA)                                          | Knowledge                 | 2    | ٤    |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Cost effectiveness analyses (CEA)                                         | Knowledge                 | 2    | ٥    |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Methods of data collection and analyses                                   | Knowledge                 | 2    | ٦    |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Incremental analyses; Evaluation outcomes                                 | Knowledge                 | 2    | ٧    |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Utility and quality of life (CUA)                                         | Knowledge                 | 2    | ٨    |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Types of pharmacoeconomic analyses, cost utility analyses (CUA)           | Knowledge                 | 2    | ٩    |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Evaluation outcomes: Net benefit, cost utility analyses (CBA)             | Knowledge                 | 2    | ١٠   |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Compare and contrast CEA, CUA and CBA                                     | Knowledge                 | 2    | ١١   |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Methods of data collection and analyses: Statistical/Econometric modeling | Knowledge                 | 2    | ١٢   |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector        | Pharmacoeconomic analyses                                                 | Knowledge                 | 2    | ١٣   |

|                                 |                                               |                                 |           |   |    |
|---------------------------------|-----------------------------------------------|---------------------------------|-----------|---|----|
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | How to make a feasibility study | Knowledge | 2 | ١٤ |
| Daily Quiz and Verbal Questions | Using the whiteboard and the projector screen | Decision Making                 | Knowledge | 2 | ١٥ |

| 11. Infrastructure                                                             |                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required Readings:                                                             | <b>References:</b><br><br><b>Essentials of Pharmacoeconomics 3rd Edition 2021</b>                                                                                                                                       |
| Special Requirements (Workshops, Journals, Software, Websites):                | <b>Electronic Websites:</b><br><a href="https://link.springer.com/journal/40273">https://link.springer.com/journal/40273</a><br><a href="https://www.ispor.org/heor-resources">https://www.ispor.org/heor-resources</a> |
| Social Services (Guest Lectures, Professional Training, Field Studies, Others) | <b>Organizing workshops and courses for graduates:</b>                                                                                                                                                                  |

| 12. Admission:             |                                         |
|----------------------------|-----------------------------------------|
| Prerequisites              | Admission according to the central plan |
| Minimum Number of Students | /                                       |
| Maximum Number of Students | Admission exceeds the capacity plan     |

**Name of the Instructor:**

م.م. علي عبد الواحد محمد علي البير