|  |  |
| --- | --- |
| **Course Title:** | **Pharmacotherapy-II** |
| **Course Code:** | **PHCP 558** |
| **Program:** | **Pharmaceutical Sciences** |
| **Department:** | **Clinical Pharmacy** |
| **College:** | **Pharmacy** |
| **Institution:** | **Najran University** |

Table of Contents

[A. Course Identification 3](#_Toc951372)

[6. Mode of Instruction (mark all that apply) 3](#_Toc951373)

[B. Course Objectives and Learning Outcomes 4](#_Toc951374)

[1. Course Description 4](#_Toc951375)

[2. Course Main Objective 4](#_Toc951376)

[3. Course Learning Outcomes 4](#_Toc951377)

[C. Course Content 4](#_Toc951378)

[D. Teaching and Assessment 5](#_Toc951379)

[1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods 5](#_Toc951380)

[2. Assessment Tasks for Students 6](#_Toc951381)

[E. Student Academic Counseling and Support 6](#_Toc951382)

[F. Learning Resources and Facilities 6](#_Toc951383)

[1.Learning Resources 6](#_Toc951384)

[2. Facilities Required 7](#_Toc951385)

[G. Course Quality Evaluation 7](#_Toc951386)

[H. Specification Approval Data 7](#_Toc951387)

# A. Course Identification

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1. Credit hours:** | | | | **3 hours (2+1)** | | | | | | | | | | | | |
| **2. Course type** | | | | | | | | | | | | | | | | |
| **a.** | University | |  | | College | | |  | Department | | | |  | Others |  |  |
| **b.** | | Required | | | |  | Elective | | |  |  | | | | | |
| **3. Level/year at which this course is offered:** | | | | | | | | | | | | **Level 9th / 5th year** | | | | |
| **4. Pre-requisites for this course** (if any)**:**  **Pharmacotherapy-I (PHCP 457)** | | | | | | | | | | | | | | | | |
| **5. Co-requisites for this course** (if any)**:** | | | | | | | | | | | | | | | | |
| **None** | | | | | | | | | | | | | | | | |

## 6. Mode of Instruction (mark all that apply)

| **No** | **Mode of Instruction** | **Contact Hours** | **Percentage** |
| --- | --- | --- | --- |
| **1** | **Traditional classroom** | 60 | 100 |
| **2** | **Blended** |  |  |
| **3** | **E-learning** |  |  |
| **4** | **Correspondence** |  |  |
| **5** | **Other** |  |  |

**7. Actual Learning Hours** (based on academic semester)

|  |  |  |
| --- | --- | --- |
| **No** | **Activity** | **Learning Hours** |
| **Contact Hours** | | |
| **1** | **Lecture** | 30 |
| **2** | **Laboratory/ Case study presentation/ problem solving sessions** | 30 |
| **3** | **Tutorial** | 0 |
| **4** | **Others** (specify) | 0 |
|  | **Total** | 60 |
| **Other Learning Hours\*** | | |
| **1** | **Study** | 40 |
| **2** | **Assignments** | 10 |
| **3** | **Library** | 0 |
| **4** | **Projects/Research Essays/Theses** | 0 |
| **5** | **Others** (specify) | 0 |
|  | **Total** | 110 |

**\*** The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

# B. Course Objectives and Learning Outcomes

|  |
| --- |
| 1. Course Description This course deals with the pharmacotherapy of major diseases of endocrine, musculo-skeletal, nervous systems and common eye disease. The potential changes in drug safety and efficacy that may occur in the presence of impaired function in any of these systems will be highlighted in order to ensure usage of the most appropriate drug at individual level the rational use of antimicrobial agents. The expanded professional role of clinical pharmacist will be highlighted as will potential area of future development. |
|  |
| 2. Course Main Objective |
| * Basic concept of the diseases of major organs (nervous and hormonal systems) * Students can choose the best therapy according to the condition of the patients. * Able to do the differential diagnosis between some common diseases. |

## 3. Course Learning Outcomes

| **CLOs** | | **Aligned****PLOs** |
| --- | --- | --- |
| 1 | **Knowledge:** |  |
| 1.1 | Describe the concepts and facts of pharmacotherapy of different disease related to endocrine, musculo-skeletal, nervous systems. bases of drug use and drug interactions as well as concepts of toxicology, | K4 |
| **2** | **Skills :** |  |
| 2.1 | Evaluate the possible therapeutic applications, interactions or interferences of drugs and pharmaceutical compounds. | S1 |
| 2.2 | Demonstrate the strategies for solving the problem related to the pharmacotherapy. | S2 |
| 2.3 | Demonstrate the skill for the selection of best therapy with the help of case study presentation | S3 |
| **3** | **Competence:** |  |
| 3.1 | Use of personal values and ethical principles in therapeutic use of medication. | C1 |
| 3.2 | Use of personal values and ethical principle in the field of work (Pharmacotherapy) | C2 |
| 3.2 | Use of advanced techniques in developing solutions of various type of disease conditions. | C3 |

# C. Course Content

|  |  |  |
| --- | --- | --- |
| **No** | **List of Topics** | **Contact Hours** |
| 1 | **Introduction to pharmacotherapy** | 1 |
| 2 | **ENDOCRINE DISORDERS**   1. Thyroid and parathyroid disorders 2. Diabetes mellitus 3. Adrenal gland disorders | 9 |
| 3 | **CNS DISORDERS**   1. Insomnia and anxiety 2. Dementia 3. Schizophrenia 4. Epilepsy 5. Parkinson's disease 6. Dementia and Alzheimer's disease 7. Depression 8. Pain 9. Nausea and vomiting | 10 |
| 4 | **RHEUMATIC DISORDERS**   1. Rheumatoid arthritis 2. Gout and hyperuricemia | 8 |
| 5 | **EYE DISORDERS**  1. Glaucoma | 2 |
| **Total** | | **30** |
|  | **Practical sessions**  **List of the case study discussed in this course**  1. Introduction of case study (How to prepare and present it)  2. Case study based on Thyroid and parathyroid gland diseases.  3. Case study based on Diabetes  4. Case study based on adrenal gland disorders  5. Case study based on parkinson’s disease, Schizophrenia, Epilepsy,  Alzheimer's disease, Depression,  6. Case study based on Rheumatoid arthritis, | 30 |
| **Total** | | 60 |

# 

# D. Teaching and Assessment

## 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

| **Code** | **Course Learning Outcomes** | **Teaching Strategies** | **Assessment Methods** |
| --- | --- | --- | --- |
| **1.0** | **Knowledge** | | | |
| 1.1 | Describe the concepts and facts of pharmacotherapy of different disease related to endocrine, musculo-skeletal, nervous systems. bases of drug use and drug interactions as well as concepts of toxicology, | Lectures | 1. Written exam  2. Assignment |
| **2.0** | **Skills** | | | |
| 2.1 | Evaluate the possible therapeutic applications, interactions or interferences of drugs and pharmaceutical compounds. | Lectures | Written exam |
| 2.2 | Demonstrate the strategies for solving the problem related to the pharmacotherapy. | Lectures | 1. Written exam  2. Presentation |
| 2.2 | Demonstrate the skill for the selection of best therapy with the help of case study presentation | Case study presentation Assignments | 1. Written exam  2. Presentation |
| **3.0** | **Competence** | | | |
| 3.1 | Use of personal values and ethical principles in therapeutic use of medication. | Lectures/ Presentation | Written exam |
| 3.2 | Use of personal values and ethical principle in the field of work (Pharmacotheray) | Lectures/ Presentation | Written exam |
| 3.3 | Use of advanced techniques in developing solutions of various type of disease conditions. | Lectures / Presentation | Practical exam presentation exam |
| … |  |  |  |

## 2. Assessment Tasks for Students

| **#** | **Assessment task\*** | **Week Due** | **Percentage of Total Assessment Score** |
| --- | --- | --- | --- |
| **1** | Midterm exam **1** | 6 | 15% |
| **2** | Assignments | 12 | 5% |
| **3** | Lab. practical quiz | 9 | 5% |
| **4** | Midterm exam **2** | 10 | 15% |
| **5** | Observation card in lab | 2-12 | 5% |
| **6** | Final practical Exam | 15 | 15% |
| **7** | Final exam | 17 | 40% |
| **8** | Total |  | 100% |

**\*Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

# E. Student Academic Counseling and Support

|  |
| --- |
| **Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :** |
| * **Office hours (5 hours per week + appointments)** * **Help session (problem solving): as required per week** |

# F. Learning Resources and Facilities

## 1.Learning Resources

|  |  |
| --- | --- |
| **Required Textbooks** | 1. Walker, R., 2011. *Clinical Pharmacy and Therapeutics E-Book*. Elsevier Health Sciences.  2. Wells BG, DiPiro JT, Schwinghammer TL, DiPiro CV. Pharmacotherapy Handbook, 9/E. McGraw Hill Professional; 2014 Aug 22. |
| **Essential References Materials** | Pharmacotherapy a pathopysiologic approach by Joseph T. DiPiro, PharmD, and etal |
| **Electronic Materials** | <http://lib.nu.edu.sa/DigitalLibbrary.aspx>  <http://www.thefreedictionary.com/pharmacotherapies> |
| **Other Learning Materials** | Micromedex |

## 2. Facilities Required

| **Item** | **Resources** |
| --- | --- |
| **Accommodation**  (Classrooms, laboratories, demonstration rooms/labs, etc.) | 2. Suitable presentation room equipped with health and safety tools, internet and sufficient number of seats |
| **Technology Resources**  (AV, data show, Smart Board, software, etc.) | Computers, data show, sound systems and internet |
| **Other Resources**  (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list) |  |

# G. Course Quality Evaluation

| **Evaluation**  **Areas/Issues** | **Evaluators** | **Evaluation Methods** |
| --- | --- | --- |
| Effectiveness of teaching strategies | Head of departments  and students | Indirect  Questionnaires (indirect) |
| Effectiveness of student assessment | Faculty members  and students | Indirect  Questionnaires (indirect) |
| Achievement of CLOs | Student  Peer reviewer | Direct  Indirect |
| Quality of learning resources | Students | Questionnaires (Indirect) |

**Evaluation areas** (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

**Evaluators** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

**Assessment Methods** (Direct, Indirect)

# H. Specification Approval Data

|  |  |
| --- | --- |
| **Council / Committee** | Clinical Pharmacy Department Council |
| **Reference No.** | 41-40-9-2 |
| **Date** | 1441-06-10 |