|  |  |
| --- | --- |
| **Course Title:** | **Computer in Pharmacy Services** |
| **Course Code:** | **PHCP 252** |
| **Program:** | **Pharmaceutical Sciences** |
| **Department:** | **Clinical Pharmacy** |
| **College:** | **Pharmacy** |
| **Institution:** | **Najran University** |

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# A. Course Identification

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1. Credit hours:**  2 (1+1) | | | |  | | | | | | | | | | | | |
| **2. Course type** | | | | | | | | | | | | | | | | |
| **a.** | University | |  | | College | | | **√** | Department | | | |  | Others |  |  |
| **b.** | | Required | | | | **√** | Elective | | |  |  | | | | | |
| **3. Level/year at which this course is offered:** | | | | | | | | | | | | **4th Level / 2nd year** | | | | |
| **4. Pre-requisites for this course** (if any)**:**  **None** | | | | | | | | | | | | | | | | |
| **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** | 45 | 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** | 15 |
| **2** | **Laboratory/Studio** | 30 |
| **3** | **Tutorial** |  |
| **4** | **Others** (specify) |  |
|  | **Total** | 45 |
| **Other Learning Hours\*** | | |
| **1** | **Study** | 8 |
| **2** | **Assignments** | 7 |
| **3** | **Library** | 5 |
| **4** | **Projects/Research Essays/Theses** |  |
| **5** | **Others** (specify) |  |
|  | **Total** | 65 |

**\*** 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 provides student with basic sciences and components of computer software and hardware and how he can use and operate the system. In addition, student through this course should understand the applications of this science in Pharmacy, medical information, and scientific research. |
|  |
| 2. Course Main Objective |
| At the end of this course student should be able to :   1. Understand and run various computer programs such as:  * Microsoft word * PowerPoint * Excel   2- Acquire the skills needed for applications of computer science in medical field. |

## 3. Course Learning Outcomes

| **CLOs** | | **Aligned****PLOs** |
| --- | --- | --- |
| 1 | **Knowledge:** |  |
| 1.4 | Demonstrate the basic concept of the computer use in Pharmacy including networking, cloud computing. Apply MS Word, MS Power point, Microsoft Excel and its Applications in Health Science Design tables and use of mathematical operations and functions in excel. | K-4 |
| **2** | **Skills :** |  |
| 2.4 | Communicate clearly and professionally by verbal and written means with colleagues. | S.4 |
| **3** | **Competence:** |  |
|  |  |  |
|  |  |  |

# C. Course Content

|  |  |  |
| --- | --- | --- |
| **No** | **List of Topics** | **Contact Hours** |
| 1 | Hardware and Software Components of Computer  Overview of Saudi Digital Library (SDL).  Overview of office 365 (Online Office). | 9 |
| 2 | Introduction to Networking and Cloud Computing | 6 |
| 3 | Overview of Blackboard System. (https://lms.nu.edu.sa/)  Microsoft Word. | 6 |
| 4 | Image Characterization (Format, Clarity, Compression) | 6 |
| 5 | Microsoft Power Point. | 3 |
| 6 | Health Informatics and its Applications. | 6 |
| 7 | Microsoft Excel and its Applications in Health Science | 6 |
| 8 | Computer Ethics | 3 |
| Total | | 45 |

# 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** | | |
| 1.4 | Demonstrate the basic concept of the computer use in Pharmacy including networking, cloud computing. Apply MS Word, MS Power point, Microsoft Excel and its Applications in Health Science Design tables and use of mathematical operations and functions in excel. | 1. Lectures. 2. Discussion. 3. Assignments. | 1. Theoretical exam   Assignment |
| **2** | Skills | | |
| 2.4 | Communicate clearly and professionally by verbal and written means with colleagues. | 1. Practical sessions 2. Data interpretation. | 1. Written Exams 2. Practical Examaboratory reports |
| **3.0** | Competence | | |
|  |  |  |  |
|  |  |  |  |

## 2. Assessment Tasks for Students

| **#** | **Assessment task\*** | **Week Due** | **Percentage of Total Assessment Score** |
| --- | --- | --- | --- |
| **1** | Midterm exam **1** | 6 | 15% |
| **2** | Assignment | 7 | 5% |
| **3** | Observation card | 10 | 5% |
| **4** | Midterm exam **2** | 8 | 15% |
| **5** | Lab. practical quiz | 14 | 5% |
| **6** | Final practical exam | 15 | 15% |
| **7** | Final exam | 16 | 40% |
|  | **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 arranged to the timetable * Students encourage to communicate on e-mail or at office * Exam error analysis in class * Feedback for each student |
|  |

# F. Learning Resources and Facilities

## Learning Resources

|  |  |
| --- | --- |
| **Required Textbooks** | Yahiya Halaby A Talib syre. Introduction to computer and problem solving. Dar wael amman Jordan |
| **Essential References Materials** | * Gwilys lodwick. The application of computer in diagnostic radiology (2009) * Russelle V. Application of computer in diagnostic radiology |
| **Electronic Materials** | <http://www.computing2014.com/> (Computing Essentials). |
| **Other Learning Materials** | Attractive power point materials |

## 2. Facilities Required

| **Item** | **Resources** |
| --- | --- |
| **Accommodation**  (Classrooms, laboratories, demonstration rooms/labs, etc.) | Lecture room equipped with Data show and computer  Computer lab. |
| **Technology Resources**  (AV, data show, Smart Board, software, etc.) | Class room equipped with data show and smart Board |
| **Other Resources**  (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list) | Library, Centre with access to high speed internet connectivity |

# 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)

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# H. Specification Approval Data

|  |  |
| --- | --- |
| **Council / Committee** | Clinical Pharmacy Department Council |
| **Reference No.** | 2-1-40-41 |
| **Date** | 24/12/1440 H |