| Philadelphia University | PHILADELPHIA | Approved Date: |
|--------------------------|-----------------------|-----------------|
| Faculty: Pharmacy | UNIVERSITY | Issue: 1 |
| Department: | THE WAY TO THE FUTURE | Credit Hours: 3 |
| Academic Year: 2021/2022 | Course Syllabus | Bachler: |

Course Information

| Course No. | Course Title | | | Prerequisite | |
|-----------------|--------------------------------|--|----------------------|--------------|-----|
| 0520328 | Pharmacology 101 0520300 | | | 0520300 | |
| Course Type | Class Time | | | Room No. | |
| University R | equirement | | *Sun, Tues (8:15-9:4 | 45 | TBA |
| Faculty Require | * | | 9:45-11:15)(12:45-2 | 2) | |
| Major Requ | ☐ Major Requirement ☐ Elective | | | | |
| ■ Compulso | ory | | * Mon, Wed (8:15-9 | :45) | |

Instructure Information

| Name | Office No. | Phone No. | Office Hours | E-mail |
|--------------------|---------------------|-----------|-----------------|------------------------------|
| Dr WAFA HOURANI | Faculty of Pharmacy | | TBA | whourani@philadelphia.edu.jo |

Course Delivery Method

| ☐ Blended | l □ Online ■ Physical | | | |
|----------------|-----------------------|--------------|----------|--|
| Learning Model | | | | |
| Damaantaga | Synchronous | Asynchronous | Physical | |
| Percentage | 0 | 0 | 100% | |

Course Description

This course is designed to provide students with the basic principles of the science of pharmacology and familiarizes them with the necessary terminology. This course is contextualized based on reflective, interactive and analytical learning. It deals with the concepts of drug receptor interaction, mode of action of drugs, adverse effects, dose-response relationship, drug toxicity, drug absorption, distribution, protein binding, metabolism and excretion respectively. It also covers the detailed information about drugs acting on the autonomic nervous system (adrenergic and cholinergic) and drugs acting on central nervous system.

Course Learning Outcomes

| Number | Outcome Knowledge | Corresponding Program Outcomes | Corresponding Competencies |
|----------|---|--------------------------------|-------------------------------|
| I/1 | | Vn1 | C1 |
| K1 K2 | *To integrate and apply pathophysiologic and pharmacotherapeutic knowledge to develop a drug therapy plan specific for each patient condition taking into account population differences and social determenants and their effect on medical care. *Being the medication expert and properly provide a patient centered care (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans and | Kp1 Kp1, Kp2, Kp4, Kp5 | C1 |
| К3 | document activities). Be familiar with clinical presentations and the differential lab and physical examinations of different diseases. | Кр1, Кр2 | C1, C2 |
| | Skills | 1 | |
| S2 | To provide the patient with a comprehensive treatment plan for his condition. | Sp1, Sp4 | C7, C10 |
| S3 | Give patients' appropriate counseling about their non pharmacological and pharmacological therapy. | Sp3 | С9 |
| S4 | Communicate appropriately with patient and medical staff. | Sp3, Sp5, Sp6, Sp8 | C9, C11, C12, C14 |

Learning Resources

| Course Textbook | Basic and Clinical Pharmacology by Katzung BG, Masters SB, Trevor AJ (editors), McGraw Hill, New York,14th edition, 2018 ISBN 978-1-259-64115-2. |
|--------------------------|--|
| Supporting References | Lippincott, Illustrated Reviews: Pharmacology by Whalen K, 6th edition, 2018. The Pharmacological Basis of Therapeutics by brunton; laurence L. Lazo, Johns S. Parker, Keith L & Alfred Goodman Gillman 11th edition McGraw Hill. ISBN 0-07-142. Pharmacotherapy: A Pathophysiologic Approach by: Joseph T. DiPiro, Gary C. Yee, L. Michael Posey, Stuart T. Haines, Thomas D. Nolin, Vicki Ellingrod. 11th edition, 2020. |
| Supporting Websites | Philadelphia University e-learning site |
| Teaching Environment | Classroom laboratory Learning Platform Other |

Meetings and Subjects Time Table

| Week | Торіс | Learning | Task | Learning |
|-------|--|---------------------|---------------------------------------|--|
| WEEK | • | Method* | Task | Material |
| 1 | Vision and Mission of Faculty of Pharmacy Course Syllabus General Principles (Pharmacy Care and Medication Therapy Management) | Lecture | | •Vision and Mission of Faculty of Pharmacy •Course Syllabus |
| 1-3 | General principles of pharmacology, terminology and general introduction, Receptors and Drug Targets | Lecture | Group Project (Clinical Case | |
| 4 | Pharmacokinetics, pharmacodynamics and ADME | | Solving) | |
| 4-5 | Drugs affecting the autonomic nervous system. General aspects of neuropharmacology. | Lecture | | |
| | Cholinergic (parasympathomimetics) drugs. | Lecture (Quiz 1)*** | | ** |
| 6-7 | Cholinergic (muscarinic) blocking agents. Ganglionic blocking agents. | (Quiz 1) | | |
| 7-8 | Neuromuscular blocking agents and Muscle relaxants | Lecture | | |
| 9 | Adrenergic (Sympathomimetic) drugs. Adrenergic blocking agents | Lecture | | |
| 10-11 | Serotonin and Serotonin antagonist. Kinins and other peptides | Lecture | | |
| 11 | Midterm Exam | |] | |
| 12 | Drug acting on the CNS .(Psychopharmacology) .General concept of psychopharmacology .Antipsychotic drugs | Lecture (Quiz 2)*** | | ** |
| 13-14 | Anti-depressant drugs | Lecture | 1 | |
| 14-15 | Anti-parkinsonian drugs | Lecture | | |
| 15 | Antiepileptic | Lecture | 1 | |
| 16 | Final Exam | | | |

^{*}Includes: lecture, flipped Class, project based learning, problem solving based learning, collaboration learning.

Course Contributing to Learner Skill Development

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|--------------|----|-----|------------|
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| USILIE | | | IU2 V |

^{**}As illustrated in the references section.

^{*}Quiz 3: TBA

- Using Microsoft office to prepare reports and presentations
- Using online medical applications/ calculators in solving some clinical problems
- Using the university's e-learning site as a supporting reference tool and for term works solving

Communication Skills

- Clinical case presentation and solving
- Teamwork and group discussions engagement

Application of Concept Learnt

Clinical cases solving

Assessment Methods and Grade Distribution

| Assessment Methods | Grade | Assessment Time (Week No.) | Course Outcomes to be Assessed |
|-----------------------|-------|-------------------------------|-----------------------------------|
| Quizzes | % 30 | Continous | K1-K3 S1-S3 |
| Reports and Projects* | % 30 | Continous | K1-K3 S1-S4 |
| Final Exam | % 40 | 16 th week | K1-K3 S1-S3 |
| Total | %100 | | |

^{*} Include: quizzes, in-class and out of class assignment, presentations, reports, videotaped assignment, group or individual project.

Alignment of Course Outcomes with Learning and Assessment Methods

| Number | Learning Outcomes | Corresponding Competencies | Learning Method* | Assessment Method** |
|--------|--|----------------------------|---------------------|------------------------|
| | Knowled | dge | | |
| K1 | Apply the knowledge obtained from this course to solve treatment | C3 | Lecture | Exams |
| | problems associated with different | | Project | Group |
| | diseases. | | based | project |
| | | | learning | |
| K2 | *To integrate and apply pathophysiologic and | C1, C2, C4, C5 | Lecture | Exams |
| | pharmacotherapeutic knowledge to | | Project | Group |
| | develop a drug therapy plan | | based | project |
| | specific for each patient condition | | learning | |
| | taking into account population | | | |
| | differences and social determenants | | | |
| | and their effect on medical care. | | | |
| | *Being the medication expert and | | | |
| | properly provide a patient centered | | | |
| | care (collect and interpret evidence, | | | |

| К3 | prioritize, formulate assessments and recommendations, implement, monitor and adjust plans and document activities) Be familiar with clinical presentations and the differential lab and physical examinations of different diseases. | C1, C2 | Lecture Project based learning | Exams Group project |
|----|--|----------------------|--------------------------------|---------------------|
| | Skill | ls | | -1 |
| S1 | Use evidence-based medicine to think critically of different medical cases. | C8 | Lecture Project | Exams Group |
| | | | based learning | project |
| S2 | To provide the patient with a comprehensive treatment plan for | C7, C10 | Lecture | Exams |
| | his condition. | | Project based learning | Group project |
| S3 | Give patients' appropriate counseling about their non pharmacological and pharmacological therapy. | C9 | Lecture Project based learning | Group project |
| S4 | Communicate appropriately with patient and medical staff. | C9, C11, C12, C14 | Project based learning | Group project |

^{*}Include: lecture, flipped class, project based learning, problem solving based learning, collaboration learning.

**Include: quizzes, in-class and out of class assignments, presentations, reports, videotaped assignments, group or individual projects.

Course Polices

| Policy | Policy Requirements |
|------------------|---|
| Passing Grade | The minimum pass for the course is (50%) and the minimum final mark is (35%) . |
| Missing Exams | Anyone absent from a declared semester exam without a sick or compulsive excuse accepted by the dean of the college that proposes the course, a zero mark shall be placed on that exam and calculated in his final mark. Anyone absent from a declared semester exam with a sick or compulsive excuse accepted by the dean of the college that proposes the course must submit proof of his excuse within a week from the date of the excuse's disappearance, and in this case, the subject teacher must hold a compensation exam for the student. Anyone absent from a final exam with a sick excuse or a compulsive excuse accepted by the dean of the college that proposes the material must submit proof of his excuse within three days from the date of holding that exam. |

| Attendance | The student is not allowed to be absent more than (15%) of the total hours prescribed for the course, which equates to six lecture days (n t) and seven lectures (days). If the student misses more than (15%) of the total hours prescribed for the course without a satisfactory or compulsive excuse accepted by the dean of the faculty, he is prohibited from taking the final exam and his result in that subject is considered (zero), but if the absence is due to illness or a compulsive excuse accepted by the dean of the college that The article is introduced, it is considered withdrawn from that article, and the provisions of withdrawal shall apply to it. |
|-----------------------|---|
| Academic Integrity | Philadelphia University pays special attention to the issue of academic integrity, and the penalties stipulated in the university's instructions are applied to those who are proven to have committed an act that violates academic integrity, such as cheating, plagiarism (academic theft), collusion, intellectual property rights. |

Program Learning Outcomes to be Assessed in this Course

| Number | Learning Outcome | Course Title | Assessment Method | Targeted Performance level |
|--------|------------------|-----------------|----------------------|----------------------------------|
| | | | | |
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Description of Program learning Outcomes Assessment Method

| Number | Detailed Description of Assessment | | | |
|--------|------------------------------------|--|--|--|
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Assessment Rubric of the Program Learning Outcomes