Philadelphia University
Faculty of Nursing
2nd semester, 2020/2021

Course Syllabus

Course Title: Pharmacology for Nursing	**Course code: 0910270**
Course Level: Second year	**Course prerequisite (s) and/or corequisite (s): Biochemistry I (0240249)**
Lecture Time: 9:45-11:15 Monday-Wednesday	**Credit hours: 3**

Academic Staff Specifics

Name	Rank	Office Number and Location	Online Office Hours	E-mail Address
Dr. Fadwa Al-Halaiqa	Associate Professor	302 1st floor Faculty of Nursing	Sun, Mon, Thurs 12-2pm	Fhalaiqa@philadelphia.edu.jo

Course module description:

Overview of drug categories and actions as applied to clients of all ages, with an emphasis on nursing care. The emphasis in this course will be on developing an understanding of how a particular type of drug works in the body and why it is given. Understanding between normal anatomy and physiology, pathophysiology, and the characteristics and actions of a particular drug will be stressed. Once the learner is able to correctly classify a drug, and he/she understands how that type of drug works in the body, the actions, side effects, and nursing implications of that drug should become apparent.

Course/ module components

Textbook:

MOSBY'S PHARMACOLOGY MEMORY NOTECARDS:
VISUAL, MNEMONIC, AND MEMORY AIDS FOR NURSES, THIRD EDITION,
ISBN: 978-0-323-07800-9, 2012

Others:

- Medical pharmacology, Udaykumar, Padmaja (Author), New Delhi: CBS Publishers & Distributors Pvt Ltd., 2011, 3d edition, ISBN: 978-81-239-1966-9.
- How drugs work: basic pharmacology for healthcare professionals, McGavock ,Hugh (Author), Oxford: Radcliffe Publishing , 2011, 3d edition, ISBN: 978-1-84619-478-8.

Learning outcomes:

1- Knowledge and understanding

1.1. Understand concepts of pharmacodynamic and pharmacokinetics processes that are associated with drug action on various body systems

1.2. Identify major sites of absorption, distribution, metabolism and excretion of drugs in general, and the factors that influence.

1.3. Describe the uses, actions, effects, indication and contraindication and nursing implications of general classifications of drugs and selected specific drugs.

1.4. List the names of drugs that belong to a specified drug class and some regulatory issues related to drugs administration and, conversely, the major drug classes to which a named drug belongs.

2- Cognitive skills (thinking and analysis).

2.1 Analyze the responsibilities of the nurse when administering drugs.

2.2 Apply the principles of pharmacology relative to Pharmacotherapeutics across age levels including the effect of race, gender, ethnic group and special populations

2.3 Identify the nature of adverse effects, the mechanisms by which a drug produces adverse effects, the signs and symptoms of those adverse effects and develop a nursing care plan to avoid or minimize those effects.

2.4 Analyze the mechanisms by which two or more drugs or drug classes interact to cause beneficial or adverse effects and the signs and symptoms of those interactions.

2.5 Develop pharmacological reasoning that relate to each disease.

3- Communication skills (personal and academic).

3.1 **P**rovide the skills for life-long learning about drug administration in this ever-changing subject.

3.2 Develop personal trust in his decision regarding drug administration and dosage based on scientific knowledge

4- Practical and subject specific skills (Transferable Skills).

4.1 Demonstrate how to identify and use available resources for the knowledgeable and safe administration of drugs.

4.2 Utilize the nursing process in the administration of drugs to clients across the life span in a variety of settings.

Assessment instruments

- Short reports and/ or presentations, and/ or Short research projects
- Quizzes.
- Home works
- Final examination: 40 marks

Allocation of Marks	
Assessment Instruments	**Mark**
Mid-term examination	**30**
Assignment, homework, quizzes and participation, and topic presentation	**20**
Final examination:	**50**
Total	**100**

Course Academic Calendar

Week	Content	Achieved ILOS	Evaluation methods
(1) **22-24/2/2021**	**INTRODUCTION** • **O**rientation (course Syllabus) • Safety measures and precautions (faculty and lab) • Safety use of equipment's, materials and machines in the lab, practice setting **ADMINISTRATION** Medication Administration, 1 Medication Calculation, 3 Ear Drop Administration, 5 Peak and Trough, 7 Guide to Drug Overdose, 9 Administration of Medications by Inhalation, 11 Transdermal Medication Administration, 13	**1.1, 1.2.** **2.1, 2.2, 3.2** **4.1**	**Mid exam**
(2) **1-3/3/2021**	**ANTIBIOTICS/ ANTIVIRALS** Cephalosporins, 15 Tetracyclines, 17 Metronidazole (Fiagyl), 19 Isoniazid (INH), 21 Aminoglycosides, 23 Antiretrovirals, 25 Drug Impact on Pregnancies, 27	**1,2,3,4**	**Mid exam**

	Ciprofloxacin (Cipro) 29 Penicillin (PCN), 31 Azithromycin (Zithromax), 33 Aminoglycoside Toxicity, 35		
(3) **8-10/3/2021**	**ANTICOAGULANTS AND HEMATINICS** Heparin, 37 Enoxaparin (Lovenox),39 Warfarin Sodium (Coumadin), 41 Epoetin Alta (Procrit), 43 Iron Supplements, 45 Thrombolytics, 47 Clopidogrel (Piavix), 49 Argatroban, 51	**1**,2,3,4	**Mid exam**
(4) **15-17/3/2021**	**CARDIAC** Antihypertensives, 53 Antihypertensive Drugs, 55 Beta-Blockers, 57 Angiotension-Converting Enzyme (ACE) Inhibitors, 59 Calcium Channel Blockers, 61 Nitroglycerin, 63 Antidysrhythmics, 65 Digitalis, 67 Lidocaine Toxicity, 69 Drugs for Bradycardia and Decreased Blood Pressure, 71 Alpha-Adrenergic Antagonists (Aipha-Biockers)-Side Effects, 73 Beta-Blocker Actions, 75 Beta-Adrenergic Antagonists (Beta-Biockers)-Side Effects, 77 HMG-CoA Reductase Inhibitors (Statins), 79	**1**,2,3,4	**Mid exam**
(5) **22-24/3/2021**	**CNS** Antiepileptic Drugs, 81 Hydroxyzine (Vistaril) and Lorazepam (Ativan), 83 Promethazine (Phenergan), 85 Midazolam (Versed), 87	**1**,2,3,4	**Mid exam**
(6) **29-31/3/2021**	**DIURETICS** Diuretics, 89 Spironolactone (Aidactone), 91	1,2,3,4	**Mid exam**
(7) **5-7/4/2021**	**ENDOCRINE** Types of Insulin, 93 Sulfonylureas, 95 Metformin (Giucophage), 97 Corticosteroids, 99 Levothyroxine (Synthroid), 101	**1**,2,3	Final exam
(8) **12-14/4/2021**	**GASTROINTESTINAL** H2-Biockers, 103	**1.1, 1.3, 3.2,3.3**	Final exam

	Psyllium (Metamucil), 105 Metoclopramide Hydrochloride (Reglan), 107 Proton Pump Inhibitors, 109 Magnesium Hydroxide (Milk of Magnesia), 111 Aluminum Hydroxide (Amphojel), 113 Antidiarrheals, 115 Lactulose, 117 Sodium Polystyrene Sulfonate (Kayexalate), 119 **MISCELLANEOUS** Atropine Overdose, 121 Potassium Chloride (Intravenous and Orally), 123 Salicylate Poisoning, 125 Toxic Levels of Lithium, Digoxin, and Theophylline, 127 Drug Interactions and Grapefruit, 129 Emergency Drugs, 131 Cancer Chemotherapy: Adverse Reactions and Precautions, 133 Oral Calcium Supplements, 135 Beta-Blocking Drugs for Glaucoma, 137 Pyridoxine (Vitamin B6): Isoniazid (INH) and Levodopa, 139		
(9) **19-21/4/2021**	**MUSCULOSKELETAL** Etodolac (Lodine), 141 Antigout Agents, 143 Bisphosphonate Therapy, 145	**1,2,3**	Final exam
(10) **26-28/4/2021**	**PAIN** Morphine Sulfate, 14 7 Analgesics: Moderate-to-Strong Opioid Agents, 149 Narcotic Antagonists: Naloxone (Narcan), 151 Nonsteroidal Antiinflammatory Drugs (NSAIDs)-Nonaspirin, 153 Acetylsalicylic Acid (ASA)-Aspirin, 155 Fentanyl, 157	**1,2,3**	Final exam
(11) **3-5/5/2021**	**PSYCHIATRIC** Selective Serotonin Reuptake Inhibitors (SSRis), 159 Monoamine Oxidase Inhibitors (MAOis), 161 Tricyclic Antidepressants163	**1,2,3,4**	Final exam
(12) **10/5/2021** **12/5/2021**	Haloperidol (Haldol), 165 Donepezil (Aricept, Aricept ODT), 167 **Holiday**	**1**,2,3	Final exam
(13) **17-19/5/2021**	**PULMONARY** Antihistamines, 169	**1**,2,3	Final exam

	Bronchodilators, 171 Advair and Spiriva, 173 Antitussives, Expectorants, and Mucolytics, 175		
(14) **24-26/5/2021**	**REPRODUCTIVE/OS** Oxytocin (Pitocin), 177 Rh0 (D) Immune Globulin (RhiG) (RhoGAM), 179 Anticholinergic Drugs for Overactive Bladder, 181 Oral Contraceptives: Serious Adverse Effects, 1 83 Erectile Dysfunction Drugs, 185	**1**,2,3	Final exam
(15) **31/5/2021** **2/6/2021**	**Revision**	**1**,2,3,4	
(16) **7-9/6/2021**	**Final exam**	**1**,2,3,4	

Expected workload:

On average students need to spend 2 hours of study and preparation for each 50-minute lecture/tutorial.

Methods of Instruction:

1- Selected reading
2- Student group work
3- Online Lectures
4- Written Paper
5- Demonstrations
6- Study Guides
7- Discussions
8- Interactive Educational Activities
9- Audiovisuals
10- Student Lead Presentation
11- Critical Thinking Exercises

Classroom Strategies

A. Class Discussion B. Media Presentations: Video, Transparencies, PowerPoint C. Group Presentations/Case Scenarios D. Critical Thinking Exercises

Evaluation Methods

A. Group/Individual Activities B. Critical Thinking Assignments C. Class Attendance/Participation D. Periodic Exams, Final Examination E. Critique of a Journal Article/written paper

Journals

Any pharmaceutical or medical Journal or related.

Websites

http://www.philadelphia.edu.jo/pharmacy/resources.html

COLLEGE POLICIES

Academic dishonesty includes the following actions, as well as other similar conduct aimed at making false representation with respect to the student's academic performance: (1) Cheating on an exam, (2) Collaborating with others on work to be presented, if contrary to the stated rules of the course, (3) Submitting, if contrary to the rules of the course, work previously submitted in pharmacology for Nursing, (4) Knowingly and intentionally assisting another student in any of the above actions, including assistance in an arrangement whereby work, classroom performance, examination, or other activity is submitted or performed by a person other that the student under whose name the work is submitted or performed, (5) Plagiarism

Attendance Policy: (Example to be adopted & modified.)

Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

Online teaching and using policy:

Any violation of this policy in term of using, dealing and communication between you and your teacher and colleagues will be considers as a violation of university rules and regulation leading to withdrawn from course.

Documentation and Academic Honesty (Example to be adopted & modified.)

Submit your home work covered with a sheet containing your name, number, course title and number, and type and number of the home work (e.g. tutorial, assignment, and project).

Any completed homework must be handed in to my office (room IT…) by 15:00 on the due date. After the deadline "zero" will be awarded. You must keep a duplicate copy of your work because it may be needed while the original is being marked.

You should hand in with your assignments:

1- A printed listing of your test programs (if any).
2- A brief report to explain your findings.
3- Your solution of questions.

- **Protection by Copyright (Example to be adopted & modified.)**

1. Coursework, laboratory exercises, reports, and essays submitted for assessment must be your own work, unless in the case of group projects a joint effort is expected and is indicated as such.
2. Use of quotations or data from the work of others is entirely acceptable, and is often very valuable provided that the source of the quotation or data is given. Failure to provide a source or put quotation marks around material that is taken from elsewhere gives the appearance that the comments are ostensibly your own. When quoting word-for-word from the work of another person quotation marks or indenting (setting the quotation in from the margin) must be used and the source of the quoted material must be acknowledged.
3. Sources of quotations used should be listed in full in a bibliography at the end of your piece of work.

- **Avoiding Plagiarism**. **(Example to be adopted & modified.)**

1. Unacknowledged direct copying from the work of another person, or the close paraphrasing of somebody else's work, is called plagiarism and is a serious offence, equated with cheating in examinations. This applies to copying both from other students' work and from published sources such as books, reports or journal articles.
2. Paraphrasing, when the original statement is still identifiable and has no acknowledgement, is plagiarism. A close paraphrase of another person's work must have an acknowledgement to the source. It is not acceptable for you to put together unacknowledged passages from the same or from different sources linking these together with a few words or sentences of your own and changing a few words from the original text: this is regarded as over-dependence on other sources, which is a form of plagiarism.
3. Direct quotations from an earlier piece of your own work, if not attributed, suggest that your work is original, when in fact it is not. The direct copying of one's own writings qualifies as plagiarism if the fact that the work has been or is to be presented elsewhere is not acknowledged.
4. Plagiarism is a serious offence and will always result in imposition of a penalty. In deciding upon the penalty the Department will take into account factors such as the year of study, the extent and proportion of the work that has been plagiarized, and the apparent intent of the student. The penalties that can be imposed range from a minimum of a zero mark for the work (without allowing resubmission) through caution to disciplinary measures (such as suspension or expulsion).

Classroom Etiquette and Student Behavior Guidelines

Students will demonstrate respect for professors and fellow students. Behavior that is disruptive to a positive learning environment reported by the faculty member will result in a warning on the first instance; the second instance might result in following the rules and regulations of the university.