Lebanese International University
School of Pharmacy
Beirut – Bekaa Campuses
Fall Semester 2022-2023
PHAR515 – Pharmacotherapeutics I: Neurology/Psychiatry
3 credits

Course Syllabus

Instructor	Campus	Sect	Room	Offered Time	Office hours	✉ Address
Jihan Safwan	Beirut	A	402-E	MW 09:30-10:45	TTh 11:00-12:30	**jihan.safwan@liu.edu.lb**
	Beirut	B	402-E	MW 11:00-12:15		
	Beirut	C	402-E	MW 12:45-14:00		
Marwan Akel	Beirut	D	404-E	TTh 08:00-09:15	TTh 11:00-12:00	**marwan.akel@liu.edu.lb**
	Beirut	E	404-E	TTh 09:30-10:45		
Maryline Mansour	Beirut	F	403-B	MW 08:00-09:15	MW 09:15-09:45	**maryline.mansour@liu.edu.lb**
Samar Younes	Bekaa	A	101-C	MW 11:00-12:15	MW 9:00-10:00	**samar.younes@liu.edu.lb**
	Bekaa	B	111-C	MW 12:30-13:45		

Course Coordinator: Dr. Jihan Safwan
Department: Biomedical Sciences
Office: School of pharmacy- Block A

COURSE PREREQUISITE:
BIOL200, BIOL360, BMED445, PHAR400, PHAR450, PHAR465, PHAR455

REQUIRED BOOKS:
- **Pharmacotherapy: A Pathophysiologic Approach (Dipiro), Tenth Edition**
- **Applied Therapeutics (Koda Kimble and Youngs Applied Therapeutics), Eleventh Edition**

COURSE DESCRIPTION:

This course identifies the pathophysiology, etiology, risk factors and signs and symptoms of most common neurologic and psychiatric disorders. It provides the non-pharmacologic and pharmacologic treatment options according to evidence-based guidelines. It introduces the students to the application of pharmacologic and pharmacokinetic parameters, and description of factors that would guide the selection of the best treatment options. It also familiarizes the students with how to evaluate the treatment therapy for psychiatric and neurologic diseases through highlighting on the monitoring parameters and important medications' adverse effects. The student will apply problem-solving strategies to patient-oriented cases and will develop patient treatment plan.

COURSE OBJECTIVES:

This course aims to prepare the students to:
1- Differentiate between the most common psychiatric and neurologic disorders.
2- Develop a patient care plan for psychiatric and neurologic disorders through selecting the appropriate pharmacological and non-pharmacological measures.
3- Evaluate the patient treatment outcomes and select appropriate alternative approaches when necessary.

INTENDED LEARNING OUTCOMES:

Upon the completion of the course, the student will be able to:

Domain 1: Foundational Knowledge

PLO	ILOs
1.1.1	• Explain the pathophysiology associated with psychiatric and neurologic disorders. • Describe signs, symptoms, and diagnostic tests of psychiatric and neurologic disorders. • Describe the different treatment modalities of various psychiatric and neurologic disorders.
1.1.2	Assess patients' treatment outcomes and prognosis.
1.1.3	• Select appropriate diagnostic tests and laboratory parameters to identify the related disease. • Choose non-pharmacologic options (behavioral/psychiatric therapy, exercise, electroconvulsive therapy, dietary habits…). • Recite various medicinal herbs (e.g. St. John's Wort) along with their safety and place in therapy.
1.1.4	Review the medications used in the management of psychiatric and neurologic disorders.
1.1.5	Report drugs side effects, dispensing and administration especially for those requiring blood level monitoring.

1.1.6	Apply knowledge to make therapeutic decisions about psychiatric and neurologic disorders taking into consideration the advances in medicine and the availability of alternative approaches.

Domain 2: Pharmaceutical Care

PLO	ILOs
2.1.2	• Describe possible drug-drug, drug-disease, or drug-food interactions. • Specify food types and drugs that may precipitate serotonin syndrome, hypertensive crisis, and migraine headaches…

Domain 3: Essentials for Practice and Care

PLO	ILOs
3.1.1	Interpret patients' history and clinical manifestations.
3.1.2	• Select the appropriate management based on the patients' subjective and objective data. • Identify complications associated with inadequate treatment of psychiatric and neurologic disorders..
3.1.3	Analyze the data to construct a patient-oriented treatment plan based on efficacy, safety, patient preference or other parameters…
3.1.5	Interpret various diagnostic, prognostic, patient and disease related factors to propose the most effective therapeutic options for psychiatric and neurologic disorders.
3.1.6	Recommend various monitoring parameters to assess safety and efficacy of selected drugs.

Domain 4: Approach to Practice and Care

PLO	ILOs
4.1.1	Identify the primary problems while selecting the appropriate therapy including allergies, age group, pregnancy, and drug resistance.
4.1.2	Explore multiple alternatives to solve identified problems.

TEACHING AND ASSESSMENT METHODS:

ILOs	Learning Methods	Assessment Methods
1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.1.6, 2.1.2	• Lectures as PowerPoint presentations	• Midterm and Final Exam (MCQ's)
3.1.1, 3.1.2, 3.1.3, 3.1.5, 3.1.6, 4.1.1, 4.1.2	• Lectures as PowerPoint presentations • Active Learning	• Midterm and Final Exam (MCQ's) • Flipped Classroom Evaluation • Case Studies • Padlet • Gamification • Miro

COURSE DELIVERY METHODS:

1. The learning platform for this course is Google Classroom.
2. The instructor will post course material as PDF, Microsoft Word, or Microsoft PowerPoint to students on Google Classroom stream. All material for assignments, homework, or other course details will be posted as well.
3. The course will be delivered remotely using synchronous (live sessions according to course schedule) and asynchronous (recordings by voice-over-PowerPoint [VOPP]) methods.
4. Live sessions will be scheduled according to the time slot when the course is offered. VOPP recordings will be shared prior to class time to allow students to watch them at their own pace before live sessions.

COURSE ATTENDANCE REGULATIONS:

1. Attendance of live sessions is HIGHLY RECOMMENDED. Please try to join them to get maximal benefit from the course.
2. During live sessions, instructors will summarize recordings and highlight essential concepts to help you understand the material. They will also answer questions, create discussions, and perhaps do quizzes online.

ONLINE ETIQUETTE:

A code of conduct should be applied in remote education. Please note the following important etiquette for live sessions:
1. You are expected to join class on time.
2. Reduce noise by using earphones and the mute button, and minimize distractions from the surroundings as much as you can.
3. Please remember that the virtual class replaces the normal (physical) class. Accordingly, make sure to professionally join the class (adequate dress code, adequate seating, avoid eating, drinking, and disrupting activities).
4. The instructor will try to create an engaging, respectful, and meaningful learning environment. Please acknowledge that by participating in discussions, asking questions, and properly interacting in the session. Be ready to share, connect and engage with the class.
5. If you choose to communicate with the instructor via chat boxes, please use appropriate, professional, English language and double check your text for mistakes before posting it.
6. If assignments or homework are posted on Google Classroom, please make sure to post your work prior to deadlines.

CHEATING REGULATIONS:

1. **Exams will be conducted on campus in a computerized format.**
2. Cheating during exams in any way or form, will not be tolerated and will be considered as evidence of academic dishonesty. Students will be referred to the grievance committee and an F will be posted on the exam.
3. Plagiarism: It is unacceptable to copy and pass off, as one's own the ideas or words of another without properly crediting the source. Turnitin, the university's designated plagiarism checker, may be used on any submitted written work. Instances of inappropriate or unacceptable academic behavior will be treated on a case-by-case basis with the consequences ranging from no credit on the assignment for those involved to automatic failure of or removal from the course. In addition, university administration may be notified.

MAKE-UP EXAMS:

- Makeup exams are not allowed and attending exams is obligatory.
- Make up exams are ONLY allowed in cases of:
  a. Death of a first degree relative ONLY
  b. Hospitalization with a valid hospital medical report: only hospital records are allowed.

GRADE DISTRIBUTION AND EXAM SCHEDULE:

Exam	Date	Time	Grade distribution
Midterm Exam	TBA	TBA	40%
Active Learning	TBA	TBA	5%
Final Exam	**Set by the university**	TBA	55%

COURSE OUTLINE:

Week	Date	Lecture number	Topic's details	Digital Tools	ILO's covered
1		1 and 2	Major Depressive Disorders	Case study + Gamification (Crossword)	**1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.1.6, 2.1.2, 3.1.1, 3.1.2, 3.1.3, 3.1.5, 3.1.6, 4.1.1, 4.1.2**
2		3	Major Depressive Disorders		
		4	Manic Depressive Disorders	Padlet	
3		5	Manic Depressive Disorders		
		6	Schizophrenia	Case Studies + Gamification (Word Search)	
4		7 and 8	Schizophrenia		
5		9	Multiple Sclerosis	Padlet	
		10	Anxiety Disorders	Case studies	
6		11	Anxiety Disorders		
		12	Childhood Disorders	Padlet	
7		13	Childhood Disorders		
		14	Eating Disorders	Miro	
8		15	Eating Disorders		
Midterm Exam					
9		16 and 17	Substance Abuse	Flipped Classroom	
10		18 and 19	Alzheimer's Disease	Case Studies	
11		20 and 21	Parkinson Disease	Miro	
12		22 and 23	Epilepsy	Case Studies	
13		24 and 25	Headache Disorders	Miro	
14		26 and 27	Sleep Disorders	Padlet	
Final Exam					