

PHCL 441: Therapeutics I

Course Syllabus

Course Coordinator:

Ghada Bawazeer, Pharm D

Office #11 Bldg. 7. room 8. Tele# 2064503. For emergency issues only, you can reach me at my cell phone 0555154828. Email gbawazeer@yahoo.com;

Course Instructors:

Clinical Instructors:

Lina Ashoor, Pharm D

Office #12 Bldg. 7; Ext# 101

Email: lashour1@yahoo.com

Lamya Al-Naim, Pharm D

Office # 9 Bldg. 7; Ext#104

Email: Lamya.Alnaim@gmail.Com

Ghada Bawazeer, Pharm D

Office #11 Bldg. 7; Ext#107

Email: gbawazeer@yahoo.com;

Nouf Al-Oudah, M.Sc.

Office #35 Bldg. 7; Ext#190

Email: noufa76@yahoo.com

Lab Facilitators:

Haya Al-Malak, M.Sc.

Office #11 Bldg. 7; Ext# 106

Email: haya_malak@yahoo.com

Jawza Al-Sabhan, M.SC.

Office #11 Bldg. 7; Ext# 106

Email: ph_jawzas@hotmail.com

Please check instructor's office bulletin boards for student's assigned office hours.

Course Schedule: (Day/location/time).

Sections: 621 and 623

Lectures Days: Sunday and Tuesday: 11-12 noon. Please observe University policy for hours during Holy month of Ramadan.

Case Discussion (Lab): Sunday 01:00 – 04:00 p.m.

Location: Classroom # 22 Bldg. 2 (lectures & lab)

Course Description:

This therapeutic course briefly reviews the pathophysiology of various diseases with primary focus on applying therapeutic knowledge to care for patients with such diseases.

Course Educational Goal

At the completion of this course, the student will have an overview of the pharmaceutical care of patients with selected diseases.

Course Learning Objectives:

At the completion of this course, the student should be able to:

- 1- Integrate pharmacology, pathophysiology, pharmacodynamic, pharmacokinetics and other biomedical and pharmaceutical sciences as they pertain to clinical therapeutics of certain disorders.
- 2- Select and recommend appropriate patient focused drug therapy treatment plans.
- 3- Apply treatment guidelines and protocols for selected patient populations.
- 4- Evaluate the appropriateness of patient specific drug therapy regimen and treatment plans.
- 5- Monitor expected therapeutic outcomes and potential adverse effects of drug therapy.
- 6- Use problem solving skills and knowledge to solve therapeutic cases.

Assigned Readings:

Gastrointestinal Module: (Dr. Lamya AlNaim)

Peptic Ulcer disease

- Applied Therapeutics: Clinical Use of Drugs. 8th ed. Chapter 27
- Eradication of *H.pylori*: A Clinical Update. Medscape general medicine gastroenterology 6 (1); 2004.

Gastroesophageal Reflux disease (GERD)

- Applied Therapeutics: Clinical Use of Drugs 8th ed. Chapter 27

Hepatitis

- Handbook of pharmacotherapy 5th ed. Chapter 23
- Instructor supplied notes

Cirrhosis

- Textbook of Clinical Pharmacy and Therapeutics, 8th ed. Chapter 50

Rheumatoid Arthritis:

- Pharmacotherapy: A Pathophysiologic Approach. 5th ed. DiPiro JT (Eds).Chapter 91 **and** pages from 1649 to 1654.
- Guidelines for monitoring drug therapy in rheumatoid arthritis. Arthritis and Rheumatism. 1996; 39 (5): 723-731
- Guidelines for the management of rheumatoid arthritis
- Medical management of rheumatoid arthritis, Clinician Reviews. 2003; 13(3): 48-53

Respiratory Module: (Dr. Lina Ashoor)

Asthma:

- Textbook of Clinical Pharmacy & Therapeutics. Chapter 34; pages 877 – 914

Chronic Obstructive Pulmonary Disease (COPD)

- Textbook of Clinical Pharmacy & Therapeutics. Chapter 34; pages 919 - 937

Pneumonia

- Textbook of Clinical Pharmacy & Therapeutics. Chapter 75; pages 1902 – 1935

Cardiology Module: (Dr. Nouf & Ghada)

Hypertension

1. The seventh report of the joint national committee on prevention, detection, evaluation and treatment of high blood pressure
2. Hypertension chapter 13. Pharmacotherapy: a pathophysiologic approach 6th ed, 2005

Ischemic Heart Disease

1. Ischemic heart disease. chapter 15, Pharmacotherapy: a pathophysiologic approach 6th ed, 2005

2. Acute coronary syndromes, chapter 16. Pharmacotherapy: a pathophysiologic approach 6th ed, 2005
3. ACC/AHA joint guidelines (highly recommended) you will find @ www.americanheart.org
 - a. ACC/AHA Pocket guidelines: management of patient with chronic stable angina
 - b. ACC/AHA 2007 Guidelines for the Management of Patients With Unstable Angina/Non–ST-Elevation Myocardial Infarction: Executive Summary
 - c. ACC/AHA Pocket guidelines: management of patient with chronic stable angina
 - d. Management of Patients With ST-Elevation Myocardial Infarction
4. **Lab reading requirement:**
 - a. Emergency and urgency hypertension
 - b. AHA/ACC Guidelines for Secondary Prevention for Patients With Coronary and Other Atherosclerotic Vascular Disease: 2006 Update

Heart Failure (HF):

- Pharmacotherapy: A Pathophysiologic Approach. 5th ed. DiPiro JT (Eds), Chapter 13
- HFSA 2006 Comprehensive Heart Failure Practice Guideline. (A copy of selected guidelines will be provided).
- Instructor notes/handout

Thromboembolic diseases:

- Applied Therapeutics: Clinical Use of Drugs 8th ed. Chapter 15
- Hirsh J et al. Guide to anticoagulant therapy: heparin: a statement for healthcare professionals from American heart association. *Circulation* 2001; 103: 2994-3018
- Ik-Kyung Jang and Marcie J. Hursting. When Heparins Promote Thrombosis: Review of Heparin-Induced Thrombocytopenia. *Circulation*, 2005; 111: 2671 - 2683.
- Ansell J, Hirsh J, Poller L, et al. The pharmacology and management of the vitamin K antagonists. *Chest*. 2004;126:204S-233S.
- Instructor notes/handout

Course Policies:

Student behavior and expectation:

- a. All students will act appropriately and professionally during class.
- b. Attendance is mandatory.
- c. Please be punctual, No late comers will be allowed into the class.
- d. Students shall respectfully ask questions, follow instructor requests when applicable.
- e. *Cell phones should be turned off or put on vibrate/silent mode. Violators will be asked to leave class.*
- f. No TALKING....No GUM Chewing during class....
- g. Please Take Off your Abayya (عباءة) it is a classroom not a Shopping Mall ☺. If you feel cold please wear heavy cloths.

Classroom format:

The student will get out of the class as much as they put in. Students are expected to read the assigned topic before coming to the class. Students are encouraged to form study groups to help each other reinforce the information learned.

This class will utilize the following educational strategies:

- a. Active learning format is encouraged during this course. Students are encouraged to engage in discussion.
- b. Microsoft PowerPoint data show.
- c. Handout may be provided to outline main points about the topic. **HANDOUTS ARE NOT SUBSTITUE FOR TEXTBOOK READINGS.**
- d. Case discussion during lectures and lab periods.
- e. Case Presentation
- f. Drug card quizzes.

Case Discussion:

During each lab all students will be given case(s)/topic to prepare for the next lab session. Students will be called randomly to answer questions pertaining to the case/topic. Students will be graded accordingly.

Case Presentation:

- a. Each student will be assigned a case (teamed with another student). Assigned cases will be distributed at the beginning of the semester. Any delay in obtaining the case is the total responsibility of the student. Students are expected to work up the case, search and consult the necessary references for appropriate recommendations.
- b. A copy of the case note/presentation should be submitted to the instructor **TUESDAY THE WEEK BEFORE YOUR PRESENTATION.**
- c. Students will have 15-20 minutes to present their cases to the class during the lab period. The presentation will be followed by 10 minutes question and answer session. It is this part of the case that will be used to evaluate students. (to have an idea about evaluation criteria please review the case presentation evaluation form).

Drug Card Quizzes:

Each instructor will provide you with the five (5) most important drugs pertaining to her module. You should know the following information on each drug: generic name, trade name, therapeutic class, dosage forms, FDA approved indications, specific doses, most important patient counseling tips. Each 5 drugs will be the subject of a quiz following each module (during lab hours-see outline table).

College policy on class attendance and exams:

- a. Missed exam or quizzes for a medical reason require an excuse from the physician. The report **MUST THEN** be signed and accepted by the academic office.
- b. Students missing $\geq 25\%$ of the course attendance (this include attendance from **both** lectures and lab) will Not be allowed to set in the final exam. Please do the math and be smart 😊

Grade Distribution:**Semester's exams and activities:**

Mid Term Exam I	15 points	<i>Topic: Gastroentology</i>
MidTerm Exam II	15 points	<i>Topic: Respiratory</i>
Case Presentation	5 points	
Drug Card Quiz x 4	10 points	
Case/topics discussed in lab	15 points	
Final Exam	<u>40 Points</u>	<i>Topic: Cardiology</i>
Total	100 points	

Please Observe College Exam Schedule for Dates of Midterms and Final Exams. Mid Term Exams will be given during the Lab hours. Please check lecture/lab outline table for important dates

Exam review session: this can be arranged if requested by the majority of the student (time arranged by students). Attendance of 90% of the class is required.

Student's complaints:

Any issues related to this course teaching, examinations and grading should be first resolved with the course lecturer promptly to ensure healthy learning atmosphere. Unresolved issues should be addressed with the course coordinator. In the unfortunate event that the issue couldn't be resolved, parties should consult with the Deputy of Head of the Department (Dr. Sinaa AlAkeel). Unresolved issues should be directed to College Vice Dean (Dr. Amal Fatani)

Course Evaluation: Students will be asked to fill an evaluation form at the end of this course. Students are encouraged to provide constructive and objective comments regarding the instructor(s) and the course content.

Lectures / Lab Outline

Week#	Day	Date	Lecture Topic	Important Activities	Case #	Topics covered in Lab
1	SUN	٢٧ شعبان	No class		No lab	
	TUE	٢٩ شعبان	PUD			
2	SUN	٤ رمضان	PUD		Lab Orientation session 1	
	TUE	٦ رمضان	PUD			
3	SUN	١١ رمضان	No classes - National Day			
	TUE	١٣ رمضان	PUD			
4	SUN	١٨ رمضان	PUD		Lab Orientation session 2	
	TUE	٢٠ رمضان	PUD			
5 - 6		٢٤ رمضان - ٥ شوال	No classes - EID Holiday			
7	SUN	٩ شوال	PUD	Dug card Quiz 1	PUD case GERD case	<ul style="list-style-type: none"> ▪ Eradication of <i>H. pylori</i>. ▪ Dx of GERD ▪ Tx of viral hepatitis B & C in patients with AIDS, RF or on chemo
	TUE	١١ شوال	PUD			
8	SUN	١٦ شوال	Pneumonia		Hepatitis Case Cirrhosis case	
	TUE	١٨ شوال	Pneumonia			
9	SUN	٢٣ شوال	ASTHMA	Mid Term 1	RA case Asthma Case	Inhalation devices
	TUE	٢٥ شوال	ASTHMA			
10	SUN	١ ذو القعدة	ASTHMA		Asthma case COPD case	
	TUE	٣ ذو القعدة	COPD			
11	SUN	٨ ذو القعدة	Hypertension	Drug Card Quiz 2	COPD case Pneumonia case	<ul style="list-style-type: none"> ▪ Emergency and urgency hypertension ▪ Secondary Prevention for Patients With CVD
	TUE	١٠ ذو القعدة	Hypertension			
12	SUN	١٥ ذو القعدة	IHD		HTN Case HTN case	
	TUE	١٧ ذو القعدة	IHD			
13	SUN	٢٢ ذو القعدة	IHD		Angina case Angina Case	
	TUE	٢٤ ذو القعدة	IHD			
14	SUN	٢٩ ذو القعدة	IHD	Mid Term II	AMI case AMI case	
	TUE	١ ذو الحجة	CHF			
15 - 16		٥ ذو الحجة - ١٦ ذو الحجة	No classes - EID Holiday			
17	SUN	٢٠ ذو الحجة	CHF	Drug Card Quiz 3	CHF Case + CHF Case	<ul style="list-style-type: none"> ▪ Non-pharmacological management in patients with CHF ▪ Anticoagulation during invasive procedures. ▪ Warfarin interactions/Pt. counseling
	TUE	٢٢ ذو الحجة	CHF			
18	SUN	٢٧ ذو الحجة	CHF		CHF Case + DVT Case	
	TUE	٢٩ ذو الحجة	CHF			
19	SUN	٤ محرم	Thromboembolic	Drug Card quiz 4	DVT Case + Anticoag case	
	TUE	٦ محرم	Thromboembolic			