





### Digihealth E-module Learning Design

#### **Course Summary**

Title Specialized Pharmacology 1

Code PHARL6403 Credit/Hours 20 hours

Program Pharmacy

Academic Year Third year

Lecturer's Name(s) Dr Racha KARAKY & Pr Marianne HADDAD







#### 1. Context

Topic: Drugs reducing gastric acidity

Designed learning time: 2 hours and 41 minutes

Size of class: 20 students

Description: This course provides the basic knowledge and general principles to effectively manage

conditions of gastric hyperacidity

Mode of delivery: Blended

#### 2. Aims

- 1-Review succinctly the physiology of gastric secretion
- 2. For each pharmacological family,
- o Name the prototype and the "me-too" agents
- o Explain the mechanism(s) of action
- o Recognize the pharmacological effects
- o Compare and contrast the pharmacokinetic parameters of the agents
- o Identify the principal adverse effects
- o Analyze the principles of good use of the drugs in order to predict their indications, precautions of use and contraindications
- o Detect the eventual drug-drug interactions

#### 3. Outcomes

Knowledge: Relate the therapeutic agents to their pharmacological families

Comprehension: Identify within a pharmacological class the differences among the agents with regard to mechanism of action, pharmacokinetic parameters and side effects

Application: Council patients about appropriate use of drugs, possible adverse effects, measures for therapy monitoring and eventual drug-drug interactions

Analysis: Evaluate the therapeutic options of relevant diseases based on the characteristics of each pharmacological class

Synthesis: Interpret a patient's pharmacotherapeutic regimens and optimize them in order to prevent drug interactions, minimize side effects, increase compliance and improve therapeutic outcomes

Evaluation: Interpret a patient's pharmacotherapeutic regimens and optimize them in order to prevent drug interactions, minimize side effects, increase compliance and improve therapeutic outcomes







#### 4. Teaching-Learning activities

# 1.1.1 Before class -View a youtube video on gastric acid secretion physiology -Build the chapter glossary

Read Watch Listen 6 minutes 1 Student Teacher not present Online

Physiological review: watch the youtube video

Linked resources

Regulating Gastric Acid Secretion: Acetylcholine, Gastrin, and Histamine

Investigate 5 minutes 1 Student Teacher not present Online

Glossary: Search for the technical terms' definitions and add them in the glossary on the shared google doc (one technical term by student)

## 1.1.2 During the class -Attend a lecture -Produce collaboratively a mindmap on chapter key concepts

Read Watch Listen 50 minutes 20 students Teacher present Face to Students face (not online)

Lecture: Attend the lecture on drugs that reduce gastric acidity

Collaborate 30 minutes 20 students Teacher present Face to Students face (no

ents face (not

online)

Mindmap: Produce a mindmap on key concepts of drugs used in the management of gastric hyperacidity

# 1.1.3 After the class -Case report on deprescription of PPIs: identify a patient on chronic PPI and apply algorithm of Dharmarajan to see if he is eligible to PPI deprescription -Crosswords game

Read Watch Listen 20 minutes 2 Students Teacher not present Online

Case report: Read the article of Dharmarajan et al.

Linked resources

File: Dharmarajan 2021 use and misuse of PPI an opportunity for deprescribing.pdf







Investigate 20 minutes 2 Students Teacher not present Online

Case report: Identify a patient using chronically PPI, describe him and apply Dharmarajan algorithm

Produce 20 minutes 2 Students Teacher not present Online

Case report: Produce a report (using the grid) and upload it on the padlet

Practice 10 minutes 1 Student Teacher not present Online

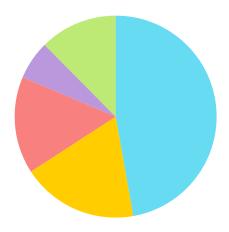
Crosswords: Solve the crosswords on drugs that reduce gastric acidity (Activinspire activity)







## 5. Representations of the learning experience



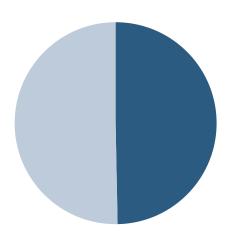
L	earning through	minutes	%
	Acquisition (Read, Watch, Listen)	76	47
	Investigation	25	16
	Discussion	0	0
	Practice	10	6
	Collaboration	30	19
	Production	20	12







	minutes	%
Whole class	80	50
Group	60	37
Individual	21	13

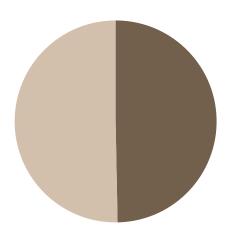


	minutes	%
Face to face (not online)	80	50
Online	81	50









	minutes	%
Teacher present	80	50
Teacher not present	81	50