

# SUBJECT TEACHING GUIDE

G136 - Pathophysiology 2

Degree in Medicine

Academic year 2023-2024

1. IDENTIFYING DATA											
Degree	Degree in Medicine	Type and Year	Compulsory. Year 3								
Faculty	Faculty of Medicine										
Discipline	Human Clinical Training Subject Area: Human Pathology	/									
Course unit title and code	G136 - Pathophysiology 2										
Number of ECTS credits allocated	6	Term Semeste		er based (2)							
Web											
Language of instruction	Spanish	English Friendly	No	Mode of o	delivery	Face-to-face					

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#### **3.1 LEARNING OUTCOMES**

- At the end of the course, the student will know which are the main manifestations of the diseases of each organ or system, and the way in which they are grouped constituting syndromes. They must understand how the abnormalities of the patient's Physiology (Pathophysiology) leads to the development of the clinical manifestations studied in Semiology. Finally, they should also know the pathogenic mechanisms derived from the effect of the general causes of the disease.



## 4. OBJECTIVES



- 1. To know the pathophysiology of respiratory insufficiency syndrome.
- 2. To know the pathophysiology of alveolar ventilation and respiratory rhythm disturbances .
- 3. To know the pathophysiology of obstructive pulmonary diseases.
- 4. To know the pathophysiology of restrictive pulmonary diseases.
- 5. To know the pathophysiology of the pleural syndrome.
- 6. To know the pathophysiology of the mediastinal syndrome.
- 7. To know the pathophysiology of disorders of the pulmonary circulation.
- 8. To know the alterations of the elemental study of urine and its pathophysiology.
- 9. To know the pathophysiology of glomerular nephropathies.
- 10. To know the pathophysiology of tubulointerstitial diseases
- 11. To know the pathophysiology of acute renal failure syndrome.
- 12. To know the pathophysiology of chronic kidney failure syndrome.
- 13. To know the pathophysiology of diseases of the urinary tract and bladder, including kidney stones.
- 14. To know the pathophysiology of disorders of motor function, tone, and reflexes.
- 15. To know the pathophysiology of sensitivity and pain.
- 16. To know the pathophysiology of the cerebral cortex: aphasias, apraxias, and agnosia.
- 17. To know the pathophysiology of syndromes of the basal ganglia.
- 18. To know the pathophysiology of the spinal cord.
- 19. To know the pathophysiology of the cranial nerves and the brainstem syndromes.
- 20. To know the pathophysiology of cerebellar and vestibular syndromes.
- 21. To know the pathophysiology of diseases of the peripheral and the autonomic nervous system.
- 22. To know the pathophysiology of consciousness disorders: sleep disorders and coma. Organic brain syndrome and dementia. Epileptic syndrome.
- 23. To know the pathophysiology of cerebrospinal fluid disorders: meningeal syndrome and intracranial hypertension syndrome.
- 24. To know the pathophysiology of cerebral circulation disorders.
- 25. To know the pathophysiology of thyroid gland diseases.
- 26. To know the pathophysiology of hypothalamic diseases
- 27. To know the pathophysiology of adenohypophysis diseases.
- 28. To know the pathophysiology of adrenal cortex diseases.
- 29. To know the pathophysiology of diseases of the adrenal medulla and the sympathochromafin system .
- 30. To know the pathophysiology of gonadal diseases.
- 31. To know the pathophysiology of diseases of the parathyroid glands and the metabolism of calcium, phosphate, and magnesium.
- 32. To know the pathophysiology of diseases of carbohydrate metabolism.
- 33. To know the pathophysiology of diseases of lipid metabolism.
- 34. To know the pathophysiology of diseases of protein and amino acid metabolism.
- 35. To know the pathophysiology of uric acid, porphyrin, and iron diseases.
- 36. To know the pathophysiology of diseases of hydrosaline metabolism.
- 37. To know the pathophysiology of diseases of potassium metabolism.
- 38. To know the pathophysiology of diseases of the acid-base balance metabolism.
- 39. To know the pathophysiology of the anemic syndrome.
- 40. To know the pathophysiology of polyglobulia syndrome.
- 41. To know the pathophysiology of the hemolytic syndrome.
- 42. To know the pathophysiology of leukocyte diseases.
- 43. To know the pathophysiology of the adenomegaly and splenomegaly syndromes.
- 44. To know the pathophysiology of hemostasis disorders.
- $\ \, 45. \ \, \text{To know the pathophysiology of thromboembolic disease} \, .$
- 46. To know the pathophysiology of joint and muscle diseases.
- 47. To know the pathophysiology of metabolic osteopathies
- 48. To know the importance of physical agents as a cause of the disease: trauma, motion sickness, gravity, weightlessness, cold, and heat.
- 49. To know the importance of radiation and electricity as causes of disease.
- 50. To know the importance of chemical agents as a cause of disease



- 51. To know the etiology, pathogenesis, pathophysiology and manifestations of inflammation and inflammatory syndromes.
- 52. To know the pathophysiology of febrile syndrome.
- 53. To know the pathophysiology of the constitutional syndrome.

6. COL	6. COURSE ORGANIZATION				
CONTENTS					
1	45h				
2	13h				
	Autonomous work (90h)				
3	2h				

7. ASSESSMENT METHODS AND CRITERIA								
Description	Туре	Final Eval.	Reassessn	%				
Essay question (long-answer questions) of the first part of the subject	Written exam	No	No	40,00				
Multiple-choice questions and short-answer question (second part of the subject)	Written exam	Yes	Yes	60,00				

## TOTAL 100,00

#### Observations

There will be two exams: a partial one, which will not be eliminatory (continuous evaluation), and a final one that will deal with the total content of the subject. The final mark will be the result of adding the mark of the first exam after adjusting it to a maximum score of 4, and that of the second exam after adjusting it to a maximum score of 6, so that the weight of each test would be 40 and 60% respectively, if the maximum qualification was obtained in both.

The final exam will consist of two parts, each of which corresponds to 50% of the final exam mark:

- a) 50 multiple choice tests with 4 possible answers, of which only one is correct. Incorrect or blank answers will not mean a negative score, but it will be necessary to answer a minimum of 30 questions correctly to pass the test, which will be equivalent to a numerical mark of 5. Scores from 30 will be scored 0 25 points for each additional correct answer. Those under 30 will be scored by inverse proportion.
- b) Short questions of each part of the subject..

In any case, to pass the subject, the final exam must be passed regardless of the mark obtained in the non-eliminatory partial. Conversely, passing this is enough to pass the subject, so that students who fail the partial exam but pass the final will receive this final mark..

#### Observations for part-time students

Part-time students must contact the responsible teacher.



### 8. BIBLIOGRAPHY AND TEACHING MATERIALS

#### **BASIC**

GARCÍA-CONDE J, MERINO SÁNCHEZ J, GONZÁLEZ MACÍAS J. Patología General. Introducción a la Medicina Clínica. Marbán. 2015

JOSÉ LUIS PÉREZ ARELLANO. Manual de Patología General. 8ª ed. del texto del Prof. Sisinio de Castro. Elsevier 2020. FRANCISCO JAVIER LASO GUZMAN. Introducción a la Medicina Clínica. Fisiopatología y Semiología. 4ª ed. Elsevier 2020.