

Academic Year/course: 2021/22

26712 - Semiotics and basic principles of physiopathology

Syllabus Information

Academic Year: 2021/22

Subject: 26712 - Semiotics and basic principles of physiopathology

Faculty / School: 104 - Facultad de Medicina

229 - Facultad de Ciencias de la Salud y del Deporte

Degree: 304 - Degree in Medicine

305 - Degree in Medicine

ECTS: 6.0

Year: 2

Semester: Second semester

Subject Type: Compulsory

Module:

1. General information

1.1. Aims of the course

The subject and its results respond to the following approaches and objectives:
The subject supposes the first contact of the student with the human Clinic so that it acquires the requirements for further learning of the rest of the subjects related in Module 3

The approach of this subject is the medical language necessary to perform the medical act, offer the resources to acquire the skills for the search of signs and symptoms and develop the Clinician who trains to perform a Syndrome Diagnostic of the patient.

The specific objectives are:

1.- Study of the causes and mechanisms that produce the disease: Etiopathogenesis

2.- Study of the functional alterations that occur in different areas.

The action of the pathogenic agent and the organic response: Pathophysiology

3.- Acquisition of skills and attitudes necessary for the collection of signs and symptoms: Physical examination

4.- Learn to value and know the physiopathological meaning of the symptoms recognized in the physical exploration: semiology

5.- Introduction to sufficient clinical reasoning to perform the main syndromic diagnoses.

6. These objectives are aligned with the following Sustainable Development Goals (SDGs): Health

(objective 3) and Quality education (objective 4), in such a way that the acquisition of the objectives

of the subject provides training and competence for contribute to some extent to its achievement

1.2. Context and importance of this course in the degree

This subject is the basis for passing on knowledge of the normality of the human body to process the mechanisms that entails getting sick as well as recognizing the main signs and symptoms of disease

1.3. Recommendations to take this course

It is recommended to have passed the following subjects: Human Anatomy, Biology, Human Biochemistry, General Physiology, Morphology Structure and Function I, II and III, and Semiology and Fundamentals of Microbiology, PD and Physical therapy

2. Learning goals

2.1. Competences

CB1 - That the students have demonstrated to possess and understand knowledge in an area of study that is the basis of general secondary education, and is usually found at a level that, while supported by advanced study, also includes some aspects that imply knowledge coming from the vanguard of its field

CB2 - That students know how to apply their knowledge to their work or vocation in a professional field, demonstrating the competencies that are usually demonstrated through the elaboration and defense of argument problems within your area of study

CB3 - That students have the ability to gather and interpret relevant data (usually within the field of study) to issue judgments that include a reflection on relevant issues of a social, scientific or ethical nature

CB4 - That students can transmit information, ideas, problems and solutions to a specialized audience as non-specialized

CB5 - That the students have developed those learning skills necessary to undertake studies later with a high degree of autonomy

2.2. Learning goals

The student, to pass this subject, must demonstrate the following results ...

1: Be able to interpret the main signs and symptoms that make up the great clinical syndromes

2: Be able to identify the main mechanisms of disease production, the fundamental alterations that manifest.

3: To know the methodology of a physical examination by apparatus and systems, interpreting it

4: Being able to evaluate and link in a reasonable way the analytical modifications basic and

5: Be able to integrate the semiological interpretation of signs and symptoms through clinical

6: Be able to establish a syndromic diagnosis based on the signs and symptoms of the patient

2.3. Importance of learning goals

The learning results obtained in this subject are important because they enable the student to face the study of the rest of the subjects that includes the Human Clinical Training and the professional, that students can exercise from the medical point of view both in primary care and Specialized

On the other hand, teamwork will contribute to the strengthening of the interpersonal relationships and comprehensive training of future doctors

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

1: The knowledge of the causes, the mechanisms that produce the disease, its physiopathological way to demonstrate, is evaluated in writing in final examination in the calls established by the academic calendar, through questions to be developed from the theoretical part, and ECG and analytical traces. It will suppose the 45% of the final grade of the subject.

2: The ability to perform a syndromic diagnosis based on clinical history and complementary tests through the resolution of practical cases, the interpretation of ECG and analytical traces. It will suppose the 45% of the final grade.

3: The skills interpretation of the student, through the active participation and spontaneous questions. At the request of the professor, in the Seminars and Workshops of the subject and habilities to be evaluated. It will suppose the 10% of the final grade.

The assessment will be made through the registration of teachers

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The learning process that has been designed for this subject is based on the following:

The subject is structured in 30.5 theoretical sessions of 1 hour each and 30.5 teaching sessions to small groups of 1 hour each, and 6.5 hours of mentoring. Also the teaching of the subject must include 80.5 hours of non-face-to-face teaching.

The content of the theoretical classes will be based on a bibliography previously recommended and adapted to the level of knowledge of the student.

4.2. Learning tasks

The course includes the following learning tasks:

- Lectures 45% 2.70 ECTS (67,50 hours):
 - Large groups: 1.22 ECTS (30.5 hours) 30 lectures
 - Small groups: 1.22 ECTS (30.5 hours) 5 Workshops and 14 clinical seminars
- Seminars. "Every student who performs practical activities in which personal data or the patient's medical history

are handled is obliged to keep the confidentiality of the same"

- Tutorials: Each teacher will tutor the students of the seminar group assigned to them.
- Non-face-to-face teaching 55% 3,30 ECTS (82,50 hours). It is the autonomous work of the student dedicated to the study and preparation of practical cases for his presentation.

4.3. Syllabus

The course will address the following topics:

- 1. Introduction to Pathology: General Etiology
- 2. Nutrition disorders: Obesity, malnutrition, vitamin deficiencies
- 3. General malignant syndrome and paraneoplastic syndrome

Circulatory system

- 4. Heart Failure
- 5. Coronary insufficiency
- 6. Hypertension and hypotension

Respiratory Syndromes

- 7. Respiratory failure
- 8. Main syndromes bronchopulmonary
- 9. Pleural Syndromes

Nervous system

- 10. Motors syndromes
- 11. Sensitive Syndromes
- 12. Brain Syndromes
- 13. Cerebellar and extrapyramidal syndromes
- 14. Pathophysiology of cerebral circulation, meningeal syndrome, and intracranial hypertension syndrome

Digestive system

- 15. Esophageal and gastric syndromes
- 16. Maldigestion and malabsorption syndromes
- 17. Jaundice and liver failure
- 18. Portal hypertension

Endocrinology and Metabolism

- 19. Pathophysiology of acid-base balance
- 20. Pathophysiology of metabolism hydrosalpinx
- 21. Pathophysiology of carbohydrate metabolism
- 22. Pathophysiology of lipid metabolism
- 23. Pathophysiology of metabolism of proteins and purines
- 24. Thyroid and Parathyroid syndromes
- 25. Adrenal syndromes

Hematology

- 26. General anemic syndrome. Poliglobulias
- 27. Pathology of hemostasis

Nephrology

- 28. Acute and Chronic renal failure
- 29. Nephritic and nephrotic syndromes. Interstitial tubule syndromes

Bases of interpretation of the E.C.G. Main alterations.

Workshops with the following program

- 1. Fever
- 2. Weight Loss

- 3. Heart murmur
- 4. Dyspnea
- 5. Chest Pain
- 6. Cough, expectoration, hemoptysis
- 7. Decreased level of consciousness
- 8. Weakness
- 9. Gastrointestinal bleeding (Melena)
- 10. Jaundice
- 11. Ascites Syndrome
- 12. Lymphadenopathy
- 13. Polyuria
- 14. Edema

Seminars with the following program

- 1. Medical history, general examination of the patient, scanning head and neck
- 2. Exploration of the chest and abdomen
- 3. Neurological examination
- 4 and 5. Major ECG abnormalities

4.4. Course planning and calendar

Calendar of face-to-face sessions and presentation of works

Lectures: 1 theoretical class/group during the appropriate period, in each subject.

The teaching of small groups: 60 hours spread over the school year in subgroups appropriate to the number of students.

4.5. Bibliography and recommended resources

THE UPDATED BIBLIOGRAPHY OF THE SUBJECT IS CONSULTED THROUGH THE LIBRARY WEB PAGE

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=26712>