

26768 - Physiology IV

Información del Plan Docente

Academic Year 2016/17

Academic center 104 - Facultad de Medicina

229 - Facultad de Ciencias de la Salud y del Deporte

Degree 304 - Degree in Medicine

305 - Degree in Medicine

ECTS 9.0

Course 2

Period Second semester

Subject Type Compulsory

Module ---

1.Basic info

1.1.Recommendations to take this course

1.2. Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3. Context and competences

3.1.Goals

3.2. Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5. Activities and resources

5.1.General methodological presentation

5.2.Learning activities

5.3. Program

Theoretical program:

- 1. Introduction to the endocrine system.
- 2. hypothalamic-posterior pituitary axis. ADH and oxytocin.



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- 3. hypothalamic-anterior pituitary axis.
- 4. Growth Hormone. Other hormones of the anterior pituitary.
- 5. Thyroid function.
- 6. Endocrine pancreas.
- 7. Control of calcium-phosphorus balance. Bone physiology.
- 8. Physiology of the adrenal cortex.
- 9. Endocrine functions of the male gonads.
- 10. Endocrine functions of the female gonads. Gonadotropins. Menstrual cycle.
- 11. Reproductive functions of man.
- 12. Reproductive functions of women. Childbirth and Breastfeeding
- 13. Functional organization of the nervous system. Circuit types and functions.
- 14. Cerebral circulation. Cerebrospinal fluid. Glia functions. blood brain barrier. Cerebral edema.
- 15. Sensory nervous system functions. Receptor properties. Modalities of sensation.
- 16. Somatic sensitivity. Skin sensitivity. Sensitivity to pain.
- 17. Visual sensitivity.
- 18. Hearing sensitivity.
- 19. Chemical Senses.
- 20. Somatic muscles. Physiology of movement.
- 21. Spinal reflexes. Somatic reflexes.
- 22. Upper adjustment of motor activity.
- 23. Vestibular function. Motor functions of the cerebellum and basal ganglia
- 24. Vegetative motor control. Integrative role of the hypothalamus.
- 25. Thermoregulation.
- 26. Sleep and wakefulness. Physiology of the pineal gland.
- 27. Emotions and motivation. Bases dependencies.
- 27. Higher functions of the nervous system.

Laboratory practices and problems program of Zaragoza:

- 1. Assessment of thyroid function
- 2. Studies in carbohydrate metabolism.
- 3. Exploring reflexes.
- 4. Exploration of the sense of balance.
- 5. Exploration and functional assessment of vision.
- 6. Physiology of optics and refraction.
- 7. Exploration of hearing.
- 8. Chemical Senses.
- 9. Sleep Study.
- 10. Temperature Curve
- 11. Patient with hyperthyroidism.
- 12. Patient with diabetes.
- 13. Patient with amenorrhea
- 14. Patient with Stroke

Laboratory practices and problems program of Huesca

- 1 Assessment of thyroid function
- 2. Study of glucose regulation.
- 3. Oral glucose tolerance test.
- 4. Exploration of reflexes.
- 5. Exploration of balance.
- 6. Functional exploration of vision.
- 7. Exploration of hearing.
- 8. Exploration and evaluation of sensitivity. Chemical senses.
- 9. Sleep Study.
- 10. Biological Cycles: basal temperature
- 11. Patient with hyperthyroidism.
- 12. Patient with diabetes.
- 13. Patient with Addison's disease.
- 14. Patient with hypercalcemia
- 15. Patient with Heatstroke



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- 16. Nervous excitability
- 5.4. Planning and scheduling
- 5.5.Bibliography and recomended resources