

26759 - General Anatomy and Human Embryology

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	6.0
Course	1
Period	First semester
Subject Type	Basic Education
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

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

Methodology : Given the nature of the discipline, we conjugaremos the theoretical and practical training so that the student will provide a better understanding of what is explained. To this end, the theoretical contents so as to allow the

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understanding of the conceptual aspects, this should ideally work the habitual use of practical examples to clarify the subject under study will be developed. As for how to impart the theoretical teaching, lesson largest group is used, the discussion addressed during the seminars and tutorial system. Coordinated and parallel to the theoretical practical teaching will be developed through personal study of biological and models related to the topics covered in lectures and through media images common diagnoses in clinical preparations. The teacher will guide and oversee the development of the class and will be discussed the practical cases previously assigned.

5.2.Learning activities

The program that the student is offered to help you achieve the expected results includes the following activities

The lectures, expository, explanatory and / or demonstration of content sessions using the blackboard and / or audiovisual material with computer support. They give students having prior knowledge of the subject, which should be actively involved and try to complement data or solve the problems that generate the most contentious points of the topic. Mandatory attendance 80%.

Presentation and discussion seminars, problem solving, case studies, simulations, discussion of scientific articles. Conducting individual or group work on a scientific topic or proposed practical problem. Reporting. Oral presentations. Sessions dissecting room, microscopy or laboratory, using appropriate instruments, classical methodologies and recent. They will include in-depth discussions of the issues already studied.

Practical sessions in the dissection room, in the room or in the laboratory microscopy, using appropriate materials and instruments, applying classic and current methodologies. In groups of 5-6 students depending on the number of enrolled.

Mandatory attendance 80%

The practical training program of the subject is constituted, in general, for the following activities:

- Observation and analysis of biological preparations and models, so tutored.
- Description and discussion of schemes and images obtained with different observation techniques and instruments provided by the teacher.
- Conduct a satchel containing and reflect what worked for the theoretical / practical student. This notebook also serve tutored work led by the teacher.
- Evaluation of skills acquired, based on the defined objectives in every practice

The work supervised by the teacher in which must employ a minimum of 1.5 hours each. These works may be carried out in small groups and to carry out the morphological preparations used.

Tutorials: Personal interview with a teacher for academic and personal guidance of the student. Consultation questions to the teachers. Students will have over the course of 5 hours of tutorials for personal or group consultations with teachers to clarify the difficulties, comments on the work and exam review

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Students have at their disposal the **ADD** or a website, where they can find:

the program of theoretical and practical classes

the schedule of lectures, seminars and practical

teaching materials for each of the topics.

the recommended bibliography and some links to other websites

" All students will be informed about the risks that may have the realization of the practices of this subject , and if dangerous products are handled and what to do in case of accident , and must sign a commitment to comply with labor standards and safety carry them out . For more information, see the information for students Unit Occupational Health and Safety . [Http://uprl.unizar.es/estudiantes.html](http://uprl.unizar.es/estudiantes.html) "

5.3.Program

Matter of General Anatomy and Human Embryology

It begins with the presentation of the different organs and systems that make up the human body. To introduce in basic and structural processes of formation, growth, maturation and aging of the different systems of the human body, with emphasis on early embryo development and supporting tissues

General Program of Anatomy and Human Embryology

1. Anatomy General. Introduction to Anatomy
2. Definitions, axes , planes and basic structural elements.
3. Organization systems and devices .
4. Concept of support structures , integument , splanchnic , endocrine and nervous .
5. Introduction to locomotor

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6. Bones . Morphology , classification and arquitectónia .
7. Joints . Morphology , classification and dynamics.
8. muscles . Morphology , classification and dynamics.
9. Introduction to the circulatory system
10. Introduction to the respiratory system
11. Introduction to the digestive system
12. Introduction to urinary tract
13. Introduction to the reproductive system
14. Introduction to the endocrine system
15. Introduction to the nervous system
16. Introduction to the study of embryology .
17. germ cells. Fertilization.
- 18.- germinal Period: Week I and II development. Nesting.
- 19.- germinal Period: Week III development. Differentiation of embryonic soma.
20. Formation of fetal membranes. Placenta.
- 21.- hematogenesis. Vasculogenesis. Cardiogénesis.
22. Development of arterial venous and lymphatic systems.
23. Genesis of the primitive gut.
24. Formation of the mouth and nostrils. facial outline.
- 25.- Branquiogénesis and its derivative organogenesis.
26. Genesis of the respiratory system.

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Organogenesis 27.- derived from the caudal foregut and transitional.

28. Evolution of the hindgut. Proctodeo training. Evolution of alantoides, cloaca, anus and final sections of the large intestine.

29. Evolution of the midgut.

30. Genesis and development of coelom. Pericardium, pleura and peritoneum.

31.- nephrogenesis. Evolution of the nephrogenic cord.

32. Evolution of Metanephros.

33. Development of the urogenital system.

34. Introduction to the development of the nervous system. Neurohistogénesis neurogenesis . Derived from the neural crest. Wrappers S.N.C.

35.- sensory placode . Development of smell , taste and touch .

36. Development of the hearing apparatus .

37.- Development vision apparatus .

38. Development of the central nervous system

39. Development of the peripheral nervous system and autonomic nervous system. paraganglia

40.- neuroendocrine system . Hypophysis. adrenal gland

41.- skeletogenesis and Artrogénesis

42.- skeletal development trunk and limbs .

43. Development of skull and skeletal face.

44.- Myogenesis . Development of neuromuscular groups .

45.- Genesis of the integumentary systems. odontogenesis

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Seminars

1. Origin and destination of the germinal layers
2. Changes in perinatal systems.
3. Human Embryology , integrated Images
4. Teratogenicity

Practices

1. Early stages of development.
2. Development of the circulatory system .
3. Development of the digestive and respiratory devices.
4. Development of the urogenital system .
5. Development of the nervous system.
6. Development of locomotor and integumentary systems.

5.4.Planning and scheduling

Schedule sessions and presentation of works

The program

It takes place on the 1st . semester : from September 19, 2016 to February 7, 2017

Exam period of January 14 to February 7, 2017

Preential

Theoretical classes : 3 hours a week .

Practical classes: 3 hours a week in the dissecting room

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Practices heads : One session a week

Seminars: 1 hour per week

Distnace : Studio and self- posted on the Web the course of ADD from the University of Zaragoza

Tutorial : 1 hour week, for guidance , strengthening and educational support in the curriculum. Face and through the Web Course

The practical organization is in each session , half the group distributed in tables 5-6 coordinated by a head table students (the head may be rotating)

For sessions in the dissection room is required , gown and gloves (legislation)

5.5.Bibliography and recomended resources

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