

68427 - Introduction to paediatrics research

Syllabus Information

Academic Year: 2020/21

Subject: 68427 - Introduction to paediatrics research

Faculty / School: 104 - Facultad de Medicina

Degree: 530 - Master's in Introduction to Medical Research

ECTS: 5.0

Year: 1

Semester: Second semester

Subject Type: Optional

Module: ---

1.General information

1.1.Aims of the course

The subject and its expected results respond to the following approaches and objectives:

1. To initiate research in the science of nutrition during growth and development in each of its stages of childhood and adolescence.
2. Initiate research to assess and apply the techniques of exploration of nutritional status in children and adolescents.
3. Initiate research in the science of nutrition during growth and development in the perinatal stage.
- 4.To initiate research in the most current pathology during growth and development in the perinatal stage.
5. Initiate research into the most up-to-date pathology in endocrinology during growth and development in each of its stages children and adolescents
6. Initiate research into the most up-to-date clinical genetic pathology during growth and development in each of its stages ildren and adolescents

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

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

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The course has a fundamentally applied orientation. The teaching and learning tasks focus on the implementation of a number of fundamental principles of pediatrics at different stages of growth and development to specific cases in the field of clinical practice, notarization and / or clinical research.

4.2.Learning tasks

The course includes the following learning tasks:

- Lectures
- Discussion forums via the virtual platform Moodle
- Work on any of the topics developed in the subject from the bibliographic search of articles of the last two years in pub-med.

4.3.Syllabus

The course will address the following topics:

Topic 1. Nutrition and exploration of the nutritional status in children

- 1. Basic concepts in child nutrition
- 2. Body composition, anthropometric assessment, bioelectrical impedance . Absorptiometry and densitometry techniques.
- 3. Dietary surveys
- 4. Energy expenditure. Concepts and valuation. Rating activity and fitness.

Topic 2. Nutrition of newborns: normal and pathological

- 1. Evaluation of growth in the nutritional status and newborns
- 2. Breastfeeding for term and preterm newborn
- 3. Infant formula and special formula in feeding the newborn normal and pathological
- 4. Nutrition of preterm newborn

Topic 3. Advances in pediatric endocrinology

- Growth and puberty
- Childhood and adolescent obesity and its complications
- New aspects of type 2 diabetes in childhood

Topic 4. Advances in pediatric clinical genetics

- 1. Introduction to genetics in pediatrics: family tree
- 2. The dysmorphic child
- 3. Chromosomopathies

4.4.Course planning and calendar

Timetable

- Tuesdays 12, 19, 26 January, 2,9,16 and 23 February 2021 from 16 to 20h.
- The final exam will take place on February 23, 2021.

Part of the course will be taught via Moodle, classroom materials will be available, including a participation forum. For the rest of the course, students will bring their work for class discussion.

Further information concerning the timetable, classroom, assessment dates and other details regarding this course, will be provided on the first day and doubts will be solved through the moodle platform.

The non-classroom teaching of the subject will be carried out following the appropriate methodology, respecting, in any case, the guidelines approved by the Governing Council of the University of Zaragoza.

4.5.Bibliography and recommended resources

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13. Medical Genetics An integrated approach. Schaefer GB and Thompson JN Jr. Eds. McGraw Hill. New York, 2014.
14. Practical Genetic Counseling. Harper P Ed., 7th ed. Hodder Arnold. London, 2010.
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