

68423 - Research in gynecology and human reproduction

Información del Plan Docente

Academic Year	2018/19
Subject	68423 - Research in gynecology and human reproduction
Faculty / School	104 - Facultad de Medicina
Degree	530 - Master's in Introduction to Medical Research
ECTS	5.0
Year	1
Semester	Indeterminate
Subject Type	Optional
Module	---

1.General information

1.1.Aims of the course

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 methodology followed in this course is oriented towards achievement of the learning objectives. It favors critical analysis and the development of research models applied to clinical practice and care for women throughout their reproductive life, the mother, and foetus during pregnancy.

4.2.Learning tasks

The course includes the following learning tasks:

- **Lectures.** Each topic of the syllabus will be presented, analysed and discussed by the teacher for 55 minutes as follows:

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- Presentation of current knowledge on the topic (15 minutes)
- Presentation of a scientific article, guideline or protocol (10 minutes)
- Group discussion (20 minutes)
- Conclusions (10 minutes)

- **Clinical cases.** They are consistent with the skills, capabilities and contents that are taught in lectures. In its selection, the following facts were taken into consideration:

- Define the desired objectives.
- Select the type of case that best fits the theme to be addressed.
- Choose the specific problem and gather information about the clinical case that students will analyze (it should be consistent with the intended learning objectives).

- **Guided assignment.** Each student must write a work supervised by one of the course teachers. The extension should be around 4-6 pages, in PDF format and submit it to the Secretary of the Department of Surgery, Gynecology and Obstetrics. The work will be based on a scientific article related to women's health during pregnancy and childbirth, or its reproductive life. It should include a critical analysis of the following points:

- Reference article.
- Aim of the study
- Identification of the type of study
- Analysis of the results
- Final critical analysis
- Implications for clinical practice

4.3.Syllabus

The course will address the following topics:

Topic 1. Assessment of foetal growth. Prenatal foetal therapy: Prof^a. Hiraldo Perez - Prof. González de Agüero.

- Concept of foetal well-being. Foetal viability. perinatal risk. Analysis of perinatal morbidity and mortality.
- Foetal Ecology. Factors and mechanisms of aggression to the human maternal-foetal ecosystem.
- The environment as a factor of aggression.
- Concept of birth defect. Prevalence and incidence.
- Concept of population screening. Types of screening in prenatal diagnosis.
- Explorations to perform within the prenatal diagnosis. Valuation usefulness and implications of their results.
- Evaluation of intrauterine fetal state.
- prenatal therapy: utero gene therapy and stem cell transplantation.
- Legal implications in the context of prenatal diagnosis of congenital defects.

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Topic 2. Foetal programming and evidence-based medicine: Prof. Orós Lopez.

- Epigenetics
- Bases of foetal programming of adult disease
- Foetal pathology and impact on adult life: preeclampsia, IUGR and prematurity
- Principles of evidence in obstetrics and gynaecology
- Acquisition of information. Primary and secondary information sources. Information resources available in our environment.
- Internet maternal fetal medicine. Addresses, information portals applications for mobile and tablet devices
- Evaluation of information. structured analysis of the evidence
- Editing academic texts in obstetrics and gynaecology. Structure of a scientific text. Managers references

Topic 3. Clinical Evidence in attendance and maternal-foetal pathology: Prof. Castán Mateo.

Topic 4. Psychosomatic gynaecology, sexual and reproductive health and immigration: Female Genital Mutilation: Prof. Tajada Duaso - Prof^a. Carazo Hernandez

- Disseminate cultural, ethical, psychosocial and psychosomatic in Obstetrics and Gynaecology
- Promote education and psychosomatic training
- Psychosomatic gynaecology in maternal-foetal medicine
- Psychosomatic gynaecology in oncology
- Psychosomatic gynaecology in sterility
- Female Genital Mutilation

Topic 5. Advances in contraception: Prof. González Navarro.

- Knowledge of new contraceptive methods, especially hormonal contraception
- Update and updated in the management of hormonal contraception

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Topic 6. Sterility and assisted Reproduction: Prof. Diaz Vega.

- Current management of infertility
- Thrombophilia in sterility and infertility
- Genetic factors in sterility.
- Morphological assessment of oocytes and embryos
- Oocyte Insemination
- Morphological criteria of embryo selection

Topic 7. Gynaecologic Laparoscopy: Prof. Romero Cardiel.

- Training in laparoscopic surgery
- Indications and contraindications of laparoscopic surgery. Advantages and disadvantages in relation to open surgery
- Surgical material. Surgical techniques
- Robotic laparoscopic surgery

Topic 8. Pathology of implantation and embryo development: Prof^a. Sobreviela Laserrada - Prof^a. Jimenez Martinez.

- Normal uterine and endometrial anatomy
- Factors involved in the foetal development
- Concept of population screening
- Procedures and scans during pregnancy
- Current status of endometrium-implantation failure relationship. Diagnostic challenges

Topic 9. Gynaecologic endocrinology: Prof. Pérez López

- Hormonal treatment of genital and breast benign pathology

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- Hormonal factors in placental and gonadal aging

Topic 10. Cervical pathology and advances in gynaecologic oncology: Prof^a. Morollón Loriz.

- Cervical pathology: epidemiology, etiological factors, types of cervical lesions, diagnosis, and treatment.
- Advances in gynecologic oncology (endometrium, cervix), ovary and vulva): Epidemiology, etiological factors, types of cervical lesions, diagnosis and treatment.
- molecular biology of cancer: carcinogenesis, metastatic processes
- Stem cells
- Target new therapies

4.4.Course planning and calendar

Timetable

- Lectures run on THURSDAYS from March 6 to April 24.

Provisional course planning

- March 6: 1. Assessment of foetal growth. Prenatal foetal therapy: Prof^a. Hiraldo Perez - Prof. González de Agüero. 2. Fetal Programming and evidence-based medicine: Prof. Orós Lopez.
- March 13: 3. Clinical Evidence in attendance and maternal-foetal pathology: Prof. Castán Mateo.
- March 20: 4. Psychosomatic gynaecology, sexual and reproductive health and immigration: Female Genital Mutilation: Prof^a. Carazo Hernandez.
- March 27: 5. Advances in contraception: Prof. González Navarro.
- April 10: 6. Sterility and Assisted Reproduction: Prof. Diaz Vega.
- April 17: 7. Gynaecologic laparoscopy: Prof. Romero Cardiel. 8. Pathology of implantation and embryo development: Prof^a. Sobreviela Laserrada - Prof^a. Jimenez Martinez.
- April 24: 9. Cervical Pathology and advances in gynecologic oncology: Prof^a. Morollón Loriz.

Assessment

- April 24: final exam.
- September 4: final exam.
- The guided assignment may be submitted to the Secretary of the Department of Surgery, Gynecology and Obstetrics before the 15 of June 2019.

4.5.Bibliography and recommended resources

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[Obstetricia y Ginecología] - Fritz, Marc A.. Endocrinología ginecológica clínica y esterilidad / Marc A. Fritz, Leon Sper
Edición española de la 8ª ed. de la obra original en lengua
Barcelona : Wolters Kluwer/Lippincott Williams & Wilkins, c
2011

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- BB** [Obstetricia y Ginecología] - González Merlo, Jesús. Ginecología y Obstetricia / J. González-Merlo, J. González Bosquet, E. González Bosquet. 9ª ed. Amsterdam ; Barcelona ; Madrid [etc.] : Elsevier Masson, 2014
- BB** [Obstetricia y Ginecología] - Obstetricia [6ª ed.] / J. González-Merlo ... [et al.] . 6ª ed. Amsterdam ; Barcelona ; [etc.] : Elsevier Masson , 2013