

**COURSE DATA****Data Subject**

<b>Code</b>	34490
<b>Name</b>	Obstetrics and gynaecology
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2021 - 2022

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1204 - Degree in Medicine	Faculty of Medicine and Odontology	5	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1204 - Degree in Medicine	16 - Human clinical training V	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
RAGA BAIXAULI, FRANCISCO	290 - Pediatrics, Obstetrics and Gynaecology

**SUMMARY**

The general objective is to form professionals, in the field of the obstetrics and gynecology with theoretical and practical knowledge, attitudes and skills that make the student able to develop an integral, healing and preventive medicine that promotes health in the field of the obstetrics and gynecology.

**PREVIOUS KNOWLEDGE****Relationship to other subjects of the same degree**

There are no specified enrollment restrictions with other subjects of the curriculum.



**Other requirements**

**OUTCOMES**

**1204 - Degree in Medicine**

- Obtain and elaborate a clinical history with relevant information.
- Perform a physical examination and a mental health assessment.
- Have the capacity to make an initial diagnosis and establish a reasonable strategy of diagnosis.
- Establish the diagnosis, prognosis and treatment, applying principles based on the best information available and on conditions of clinical safety.
- Indicate the most accurate therapy in acute and chronic processes prevailing, as well as for terminally ill patients.
- Plan and propose appropriate preventive measures for each clinical situation.
- Acquire proper clinical experience in hospitals, health care centres and other health institutions, under supervision, as well as basic knowledge of clinical management focused on the patient and the correct use of tests, medicines and other resources available in the health care system.
- Know how to use the sources of clinical and biomedical information available, and value them critically in order to obtain, organise, interpret and communicate scientific and sanitary information.
- Know how to use IT in clinical, therapeutic and preventive activities, and those of research.
- Proper organisation and planning of the workload and timing in professional activities.
- Team-working skills and engaging with other people in the same line of work or different.
- Criticism and self-criticism skills.
- Capacity for communicating with professional circles from other domains.
- Acknowledge diversity and multiculturality.
- Consideration of ethics as a fundamental value in the professional practise.
- Working capacity to function in an international context.
- Knows the characteristics of pregnancy, normal and pathological delivery. Puerperium period. Is aware of exploration and follow-up criteria.
- Understands the characteristics of sexually transmitted diseases.
- Recognises, diagnoses and guides the management of the main gynaecological pathologies.
- Knows the characteristics of contraception and fertilisation.
- Knows how to perform a complete anamnesis, focused on the patient and orientated to various pathologies, interpreting its meaning.



## LEARNING OUTCOMES

### **Specific objectives:**

- Knowing the concept of normality and abnormality in obstetrics and gynecology.
- Knowing the stages of a normal pregnancy and childbirth.
- Knowing the importance and prevalence of each pathology.
- Knowing the symptoms, the clinical exploration and the complementary diagnostic methods to know how to perform a differential diagnosis.
- Knowing the prognosis and the information to be delivered to the patient and family.
- Knowing the general treatment of the main problems in obstetrics and gynecology.
- Identifying the situations that need to send the patient to a specialized centre.
- Knowing the prevention patterns, if any, to establish them into the community.
- Knowing the elective and urgent surgical indications in obstetrics and gynecology.
- Knowing the foundations of the most frequent surgical techniques in obstetrics and gynecology.
- Acquiring the necessary clinical skills for this discipline.
- Knowing how to look for bibliography and documentation in this field.

### **Skills to be acquired**

- Knowing how to behave in the consultation.
- Acquire communication skills with the patients.
- Learning the exploratory patterns of the gestational visits.
- Learning the exploratory patterns of a gynecological and breast examination.
- Acquiring the necessary habit to set the diagnosis and the differential diagnosis in obstetrics and gynecology.
- Knowing the value of the different diagnostic tests in obstetrics and gynecology.
- Knowing the management and basic treatment of the obstetrics and gynecology problems.
- Identifying the pathology that must be sent to a specialized centre.



**The student must know how to do with competence (with routine and without supervision)**

The clinical history in obstetrics and gynecology.

A basic gynecological exploration that includes the introduction of a vaginal speculum, sample taking for a cytology and bimanual examination.

An obstetric examination, knowing if it is a close or dilated cervix.

Uttering a suspect diagnosis judgement according the anamnesis performed about a frequent obstetric-gynecological pathology.

Announcing the series of pertinent complementary explorations to confirm/refuse the suspect diagnosis, as well as knowing the semiological value of the demanded complementary explorations.

**Watch how an expert practices them**

Obstetric echographies in the 3 terms of the pregnancy.

Gynecological echographies.

Vaginal childbirth (spontaneous or with tools).

Cesarean.

Colposcopy.

Gynecological endoscopy (hysteroscopy, laparoscopy).

Minor obstetric-gynecological surgery (chorial biopsy, amniocentesis, cordocentesis, cerclage, curettage, conization).

Major gynecological surgery (myomectomy, hysterectomy, adnexectomy, etc.).

**Skills to complete his/her learning:**

Capacity to work in groups and set problems collectively among different professionals.

Capacity to plan and guide his/her own learning.

## DESCRIPTION OF CONTENTS

### 1. The normal pregnancy.



- Brief memory about implantation and placentation.
- Maternal changes during pregnancy.
- Pre-conception advice.
- Pregnancy diagnosis.
- Clinical guidance of the pregnancy.

## **2. Prenatal diagnosis. Fetal anomalies.**

- Prenatal diagnosis. Fetal anomalies.
- Prevalence and classification of fetal anomalies.
- Genetic and environmental causes (physical, chemical and biological agents).
- Pattern of the prenatal screening.
- Prenatal diagnostic techniques.
- Therapeutic options.

## **3. Intrinsic pathology of the early gestation.**

- Hyperemesis gravidarum. Abortion.
- Ectopic pregnancy.
- Gestational trophoblastic disease.

## **4. Intrinsic pathology of the advanced gestation (I).**

- Preterm childbirth.
- Early rupture of membranes.
- Prolapse of the cordon.
- Alterations of the amniotic fluid (oligohydramnios, polyhydramnios).
- Chorioamnionitis.
- Post-term pregnancy.

## **5. Intrinsic pathology of the advanced gestation (II).**

- 1) Multiple pregnancies.
  - Epidemiology.
  - Classification.
  - Risks and complications.
  - Gestational control and childbirth attendance.
- 2) Hemorrhages of the 2nd half.
  - Previous placenta.
  - Placenta early detachment.
  - Others (vasa previa, etc).





### **6. Intrinsic pathology of the advanced gestation (III).**

- Brief memory about fetal and placenta physiology.
- Restricted intrauterine growth.
- Loss of the fetal welfare.
- Methods of ante-partum and intra-partum fetal control.

### **7. Intrinsic pathology of the advanced gestation (IV) and other maternal disorders.**

Hypertensive disorders of the pregnancy:

- Classification.
- Epidemiology.
- Etiopathogenesis.
- Clinic.
- Complications.
- Diagnosis.
- Prevention.
- Treatment.
- Diabetes and pregnancy.
- Diabetes mellitus.
- Gestational diabetes.

### **8. Medical disorders during pregnancy**

- Neurological pathology: epilepsy.
- Respiratory pathology: bronchial asthma.
- Digestive pathology (cholestasis, others).
- Endocrine pathology (thyroid disease).
- Renal pathology.
- Hematological pathology: anemias.
- Cardio-circulatory pathology (cardiopathies, venous thromboembolism)
- Systemic erythematosus lupus and anti-phospholipid syndrome.

### **9. Labor, delivery and normal puerperium**

- Stages and mechanism of the childbirth.
- Clinical guidance of the childbirth.
- Childbirth induction.
- Analgesia and obstetric anesthesia.
- Postpartum period.
- Lactation.



#### 10. Pathological childbirth.

- Dynamic dystocia.
- Mechanic dystocia.
- Fetal dystocia.

#### 11. Childbirth and pathological postpartum period

- Postpartum hemorrhage.
- Uterine rupture.
- Amniotic fluid embolism.
- Postpartum period infection.
- Postpartum period depression and psychosis.

#### 12. Physiology and disorders of the menstrual cycle.

- Physiology of the menstrual cycle.
- Physiology of the puberty and menopause.
- Dysfunctional uterine hemorrhage.
- Dysmenorrhea.
- Pre-menstrual syndrome.

#### 13. Disorders in the reproductive development. Amenorrheas.

Amenorrhea:

- Etiological classification.
- Differential diagnosis.
- Therapeutic modalities.

Ambiguous genitals and intersexual conditions.

#### 14. Ovulation disorders. Hirsutism.

- Polycystic ovaries syndrome.
- Other ovulation disorders.
- Hirsutism.

#### 15. Puberty, climacteric and menopause.

- Early puberty
- Menopause.
- Substitutive hormonal therapy.



## **16. Contraception.**

Types of contraceptive methods.

- Natural methods.
- Barrier methods.
- Hormonal contraceptives.
- Intrauterine dispositive.
- Surgical methods.
- Efficiency of the contraceptive methods.

## **17. Sterility: repetition abortion.**

Sterility:

- Concept and epidemiology.
- Causes.
- Evaluation of the infertile couple.
- Techniques of assisted reproduction.

Common abortion:

- Concept and epidemiology.
- Causes.
- Evaluation of the couple with common abortion.
- Therapeutic modalities.

## **18. Infections of the genital exploration.**

Vulvovaginitis:

- Candidiasis.
- Bacterial vaginosis.
- Trichomoniasis.
- Others.

Pelvic inflammatory disease.

## **19. Organic pathology of the inferior genital exploration: vulva, vagina and cervix**

- Benign vulvar pathology.
- Vulvar intraepithelial neoplasia (VIN)
- Vulva and vagina cancer.
- benign pathology.
- Pre-malignant pathology: cervical intraepithelial neoplasia (CIN).
- Cervix cancer.





## **20. Uterus pathology**

- Fibroids.
- Adenomyosis.
- Endometritis.
- Endometrial polyps.
- Müller malformations.
- Endometrium cancer.

## **21. Genital dystopia and urinary incontinence.**

Genital dystopia:

- Types.
- Etiopathogenesis.
- Clinic.
- Diagnosis.
- Treatment.

Urinary incontinence:

- Etiological classification.
- Diagnostic methods.
- Therapeutic modalities.

## **22. Ovary pathology.**

Benign ovary tumours:

- Types.
- Clinic.
- Diagnosis.
- Treatment.

Ovary cancer:

- Extension mechanisms.
- Clinic.
- Diagnosis.
- Staging.
- Treatment.

## **23. Breast pathology.**

- Benign breast pathology.
- Malignant breast pathology.



## **24. CLINICAL CASES PRACTICES**

### **24. Perinatal hemolytic disease**

Diagnosis.

Prevention and treatment.

## **25. SEMINARS**

### **25. Differential diagnosis of the obstetric and gynecological hemorrhages.**

Differential diagnosis of obstetric hemorrhages first term.

Differential diagnosis of obstetric hemorrhages second and third term.

Differential diagnosis of gynecological hemorrhages.

### **26. Differential diagnosis of the pelvic algias. Endometriosis.**

Differential diagnosis of acute pelvic algias.

Differential diagnosis of chronic pelvic algias.

Endometriosis.

### **27. Teratogenesis. Fetal infection. Maternal pathology and pregnancy.**

Clinical cases of teratogenesis and pregnancy:

- Physical agents.
- Chemical agents.
- Biological agents.

Clinical cases of medical pathology and pregnancy.

### **28. Surgical anatomy and gynecological surgery. Images in gynecology.**

Surgical anatomy.

Gynecological surgery.

Images in gynecology.

### **29. Images in obstetrics. Normal childbirth and tocurgia.**

Maternal images.

Fetal images.

Videos of the childbirth mechanism.

Videos of the childbirth attendance.

Tocurgia.

### **30. Complementary tests and procedures in obstetrics, gynecology and reproduction.**

Analysis in obstetrics.

Analysis in gynecology.

### **31. Role of the general doctor in gynecology\*:**

Prevention of the uterine cervix cancer.

Contraception.

Dysfunctional hemorrhage.



Menopause.

32. Role of the general doctor in obstetrics\*:

Pre-conception consultation.

Pregnancy control.

Medical guidance of the childbirth.

Postpartum period control.

(\*) Seminars to be prepared by the students.

## **26. Classroom practices of clinical skills**

33. Obstetric exploration and delivery assistance with mannequins.

Obstetrics and gynecological anamnesis

Obstetric explorations with mannequins

Childbirth attendance with mannequin

34. Gynecological and breast exploration with mannequins.

Speculum placement and cytology obtaining.

Gynecological bimanual exploration.

Breast exploration.

## **27. CLINICAL PRACTICES**

35. Attendance to an obstetrics and gynecology hospital duty.

Obstetric emergencies.

Gynecological emergencies.

Delivery room.

Emergencies surgery room.

\* It will be held during the weekend:

- Friday: from 3pm until 10pm

- Saturday and Sunday: from 10am until 8pm

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	26,00	100
Seminars	22,00	100
Clinical practice	23,01	100
Laboratory practices	4,00	100
<b>TOTAL</b>	<b>75,01</b>	

**TEACHING METHODOLOGY**

The following teaching tools will be used:

- Attendance to theoretical lessons
- Consultation of the teaching material uploaded to Aula Virtual
- Participation in interactive clinical seminars
- Practices about explorations on mannequins
- Electronic tutorials
- Attendance to obstetrics and gynecology hospital duty
- Consultations of recommended bibliographical material
- Theory classes:
  - Most of the theory lessons will not be given in the traditional master lecture format. Instead, the teacher will upload the theory topic to Aula Virtual before the lesson so that the student can read the topic and make the most of the lesson.
  - Guided by the teacher, the lesson will be dedicated for the students to solve one or several clinical cases that illustrate the most important aspects of the subject.
  - The interactive clinical cases taught in class will NOT be uploaded to Aula Virtual, so that only those students who attend to the lessons can benefit from these cases.
- Classroom practices - Seminars:
  - In small groups, the teacher will raise problems of differential diagnosis, interpretation of analytics, images and videos and resolution of clinical cases, encouraging interactive participation of students to solve the proposed activities.
  - In seminars 31 and 32, students will be distributed in small groups and they will be assigned open clinical cases. The day of the seminar the students will hand over a written report of the developed case and will make an oral presentation of it. They should also answer the questions the teacher asks them. These activities are intended to promote group work and cooperative learning.



- Practices in the classroom, clinical skills:

- In small groups and guided by the teacher, students will practice on mannequins and will acquire skills in basic exploratory systematics in obstetrics and gynecology (speculoscopy, cytology, gynecological touch and obstetric touch) and assistance in childbirth. They will also practice performing anamnesis in obstetrics and gynecology.

- Clinical practices:

- Students will perform an obstetrics and gynecology guard. They will be distributed in groups of 2 students among the 4 university hospitals of Valencia. Students will be able to observe how emergency situations are addressed in our specialty, and witness births, caesarean sections and the surgical activities that take place in the emergency room. The students will have to write and hand over a report of the activities carried out during the guard.

- Tutorials:

- Students can contact teachers, preferably via email, to resolve any doubts that may have arisen in the various training activities.

## EVALUATION

### Requirements to pass the subject:

- Have attended clinical seminars and clinical skills workshops \*
- Have actively participated in the preparation and presentation of the contents required in seminars 31 and 32 \*
- Having performed the obstetric and gynecological guard, and delivered the written report of activities performed during the guard \*
- Pass the final exam of the subject \*

\* The students repeating the course can choose to repeat the seminars, workshops and the guard, as long as they inform the Secretariat of our Teaching Unit during the first week of the course. If they opt for this option, they are treated as new students and can opt for the same bonuses (but they also undergo the same penalties for not attending). In case of not wanting to repeat these practice activities (and as long as they have done them in the previous course), they are exempted from the obligation to attend but in that case they can not opt for the bonuses we give to the students who do attend to these activities and perform with sufficient quality the work we entrust them.

### Final exam of the subject:

- It will be a multiple choice test with a single valid answer out of 5 possible.
- The content of the test will be the same for all groups of the same subject .





- Every 3 failed answers will subtract 1 correctly answered question.
- To pass, it is necessary to score at least a 5 out of 10.
- 50% of the questions will be about the contents of the theory syllabus and the other 50% about the contents of the various practice activities carried out (clinical case, clinical seminars, clinical skills workshops and clinical practices).

**Final mark:**

- The base mark will be obtained from the result of the final test.
- Students can be rewarded with a maximum of 4 correctly answered extra questions in the final test, based on their participation in seminars 31 and 32, whose contents must be elaborated by the students themselves.\*
- One correctly answered question will be subtracted from the final testmark for each one of the unexcused absences to the programmed practice activities (seminars and workshops).\*
- The written report of the activities carried out during the guard, besides from being a requirement to pass the subject, may be taken into account in the allocation of honors. The Teaching Unit of Obstetrics and Gynecology may also decide whether to reward those exceptionally well-made reports with another extra question correctly answered from the final exam \*.

\* The students repeating the course who choose not to repeat practice activities (as long as they took the previous course), will not be eligible for bonuses neither subject to penalties based on participation in these training activities.

It is required in order to access the advance call of this subject that the students have completed all their practices.

Attendance to practical sessions is mandatory. Unjustified non-attendance to more than 20% of the sessions will make it impossible to pass the course.

## REFERENCES

### Basic

- Ginecología y Obstetricia para el Grado de Medicina. Editorial Médica Panamericana, 2014. ISBN 978-84-9835-760-8.

### Additional

- Casos clínicos de Obstetricia y Ginecología. Editorial Médica Panamericana, 2012. ISBN 978-84-9835-396-9.



- Obstetricia y Ginecología. Editorial Marbán, 2010. ISBN 978-84-7101-674-4.
- Williams Obstetricia. Editorial McGraw-Hill, 2010. ISBN 978-60-7150-463-0.
- Tratado de ginecología, obstetricia y medicina de la reproducción de la Sociedad Española de Obstetricia y Ginecología. Editorial MédicaPanamericana. 2013. ISBN 84-7903-756-3.

## **ADDENDUM COVID-19**

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

Siguiendo las recomendaciones del Ministerio, la Consellería y el Rectorado de nuestra Universidad, para el período de la "nueva normalidad", la organización de la docencia para el segundo cuatrimestre del curso 2021-22, seguirá un modelo híbrido, donde tanto la docencia teórica como práctica se ajustará a los horarios aprobados por la CAT pero siguiendo un modelo de Presencialidad / No presencialidad en la medida en que las circunstancias sanitarias y la normativa lo permitan y teniendo en cuenta el aforo de las aulas y laboratorios docentes. Se procurará la máxima presencialidad posible y la modalidad no presencial se podrá realizar mediante videoconferencia cuando el número de estudiantes supere el coeficiente de ocupación requerido por las medidas sanitarias. De manera rotatoria y equilibrada los estudiantes que no puedan entrar en las aulas por las limitaciones de aforo asistirán a las clases de manera no presencial mediante la transmisión de las mismas de manera síncrona/asíncrona via "on line".