

## **Maternal-foetal Medicine**

Code: 103651 ECTS Credits: 3

2024/2025

Degree	Туре	Year
2502442 Medicine	ОТ	4

### Contact

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#### **Teachers**

Gemma Ginovart Galiana Miguel Angel Luna Tomás Félix Castillo Salinas

# **Teaching groups languages**

You can view this information at the <u>end</u> of this document.

# **Prerequisites**

It is advisable that the student has reached the competences developed during the previous courses.

Sufficient knowledge about the psychological basis of health and disease states is desirable, as well as an adequate level of knowledge in interpersonal communication.

The student will acquire the commitment of preserving the confidentiality and professional secrecy of the data to which he/she may have access because of the learning in the assistance services. Also to maintain an attitude of professional ethics in all its actions.

## **Objectives and Contextualisation**

It is an optional subject that can be taken from the fourth year and whose general objective is that the student becomes familiar with professional practice in the real context of perinatology.

### Competences

Demonstrate an understanding of the fundamentals of action, indications, efficacy and benefit-risk ratio
of therapeutic interventions based on the available scientific evidence.

- Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
- Establish a diagnostic approach and a well thought-out strategy for action, taking account of the results
  of the anamnesis and the physical examination, and the results of the appropriate complementary tests
  carried out subsequently.
- Indicate the basic diagnosis techniques and procedures and analyse and interpret the results so as to better pinpoint the nature of the problems.
- Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
- Recognize one's role in multi-professional teams, assuming leadership where appropriate, both for healthcare provision and for promoting health.
- Use information and communication technologies in professional practice.

# **Learning Outcomes**

- 1. Assess the efficiency of the main therapeutic interventions.
- 2. Assess the relationship between efficacy and risk in the main therapeutic interventions.
- 3. Compare one's own opinions with those of colleagues and other healthcare professionals as a basis for teamwork.
- 4. Critically assess the results of complementary examinations, taking their limitations into account.
- 5. Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
- Establish a method for complementary examinations, in accordance with the standard process and the diagnostic expectations.
- 7. Establish a therapeutic action plan considering the needs of patients and their family and social environment, and involving all members of the healthcare team.
- 8. Indicate and interpret the basic techniques and procedures for laboratory diagnosis, diagnostic imaging and others.
- 9. Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
- 10. Obtain, in an appropriate way, clinical samples needed for laboratory tests.
- 11. Order signs and symptoms to perform a differential syndromic diagnosis.
- 12. Use information and communication technologies in professional practice.

### Content

- 1. Introduction to Perinatology. Perinatal mortality and maternal mortality. Concepte de risc obstetric elevat. Organització sanitària in function of the risc.
- 2. Medical research in perinatology.
- 3. Perinatal mental health: Perinatal pain.
- 4. Great advances of the perinatology. Historical perspective. Who are the current challenges?
- 5. The myths of pregnancy and lactation.
- 6. Maternal diseases during pregnancy with influence on perinatal health: emerging diseases.
- 7. Impact of fetal life on adult health.
- 8. Congenital perinatal infections I: General. Infection by herpesvirus type 1 and type 2, cytomegalovirus, varicella-zoster virus, other herpesviruses. Infection with parvovirus B19, enterovirus. Infection by zika virus. COVID-19.
- 9. Congenital perinatal infections II: Infection for HIV. Hepatitis B, hepatitis C. L. Parasitic infections: toxoplasmosis, Chagas disease, malaria.

- 10. Neonatal infections: Early sepsis. Late sepsis, nosocomial infection. Immunoprophylaxis during pregnancy and neonatal (influenza, whooping cough).
- 11. Fetal life and transition to extrauterine life. Hypoxico-ischemic encephalopathy. Consequences in the short, medium and long term. Measures to improve neurological outcomes.
- 12. Screening newborns of metabolopathies and other diseases. Inborn errors of metabolism. Genetic and chromosomal diseases of neonatal presentation.
- 13. Neonatal respiratory distress Respiratory causes and their treatment. Congenital cardiopathies of neonatal presentation.
- 14. Malformations and congenital surgical diseases in the prenatal or neonatal period.
- 15. Social pediatrics during pregnancy and the neonatal period: Prenatal visit. Fetal and neonatal abuse. Perinatal bioethics.

## **Activities and Methodology**

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
ASISTENCIAL CLINICAL PRACTICES (PCAh)	15	0.6	
Directed	15	0.6	
Type: Autonomous			
Autonomous	41.25	1.65	

The final organization of the subject with respect to the number and size of groups, distribution in the calendar and dates of examinations, specific evaluation criteria and review of exams, will be specified in each of the hospital teaching units (UDH), which will make it explicit through its web pages and the first day of class of each subject, through the professors responsible for the subject at the UDH.

For the present course, the professors appointed by the Department as responsible are:

UDHVH	UDHGTP	UDPT		
Felix Castillo felix.castillo@vallhebron.cat	Gemma Ginovart gginovart.germanstrias@gencat.cat	Carme Figaró mfigaro@tauli.cat		
	Miguel Ángel Luna maluna.germanstrias2gencat.cat			

In certain exceptional circumstances, at the discretion of the teachers and also depending on the resources available and the public health situation, some of the theoretical classes, practicals and seminars organized by the Teaching Units may be taught either in person or virtually.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

#### Assessment

#### Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Delivery of reports / written works.	50%	1.75	0.07	3, 5, 7, 6, 8, 9, 10, 11, 12, 4, 1, 2
Practical evaluation	50%	2	0.08	3, 5, 7, 6, 8, 9, 10, 11, 12, 4, 1, 2

Continuous evaluation, discussion of cases: evaluation of the qualitative participation of the student and delivery of resolutions of cases worked in the seminar.

Evaluation of the works: each student will have to elaborate and present a work based on a clinical case lived during the practices of the subject.

Oral recovery test in case the student does not pass the initial evaluation.

When it is considered that the student has not been able to provide enough evidence of evaluation in the minutes, this subject will be recorded as non-evaluable. The teaching guide has to establish the criteria to assign a non-evaluable one.

This subject does not provide the single assessment system.

## **Bibliography**

### Obstetrics

Obstetric clinical algorithms . Wiley Online Library eBooks EBS 2019 Errol R. Norwitz, George R. Saade, Hugh Miller, Christina M. Davidson. 2nd edition. ISBN 9781118849873 (pdf) | ISBN 9781118849880 (epub)

https://login.are.uab.cat/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edspub&AN=edp1179

Protocol de seguiment de l'embaràs a Catalunya 3ª ed.: Generalitat de Catalunya. Departament de Sanitat i Seguretat Social, 2018 (

 $\underline{\text{http://salutpublica.gencat.cat/web/.content/minisite/aspcat/promocio\_salut/embaras\_part\_puerperi/protocol\_segui}).$ 

Protocol de cribratge prenatal d'anomalies congènites a Catalunya. Departament de Sanitat i Seguretat Social, 2018 (

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Tratado de Ginecología, Obstetricia y Medicina de la Reproducción. 2 tomos. Dir. Luis Cabero Roura. Editorial Médica Panamericana. 2012.

https://login.are.uab.cat/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edspub&AN=edp1430

#### Neonatology

Avery's diseases of the newborn. T Sawyer, CA Gleason, 11th ed. Elsevier, 2023.

Cloherty and Starks. Maual of Neonatl Care. Wolters Kluwer, 2021.

Drugs in pregancy. RN Al-Zidan. Apple Academic Press, 2021

Fanaroff & Martin's Neonatal-perinatal medicine. Diseases of the fetus and infant. RJ Martin, AA Fanaroff, MC Walsh, 11<sup>th</sup> ed. Saunders Elsevier 2019.

Fetus and neonatal physiology. R Polin, NW Fox, SH Abman, 5th ed. Elsevier Saunders, 2017.

Infectious diseases of the fetus and newborn infant. C Wilson, V Nizet, Y Maldonado, J Remington, J Klein. 8<sup>th</sup> ed. Elsevier Saunders, 2016.

Merenstein & Gardner's Handbook of Neonatal intensive care. Elsevier 2021.

## **Software**

No requiered

# Language list

Information on the teaching languages can be checked on the CONTENTS section of the guide.