



## HUMANITAS MEDICAL SCHOOL

**Course:** \_ Obstetrics and Gynecology course Medicine and Surgery

**Year (1<sup>st</sup>-2<sup>nd</sup>-3<sup>rd</sup>-4<sup>th</sup>-5<sup>th</sup>-6<sup>th</sup>):** \_5<sup>th</sup>

**Period (1<sup>st</sup>-2<sup>nd</sup> semester – annual):** 2<sup>nd</sup> semester

**Credits:** 5

**Coordinator:**

Prof. Nicoletta Di Simone, MD, PhD, [nicoletta.disimone@hunimed.eu](mailto:nicoletta.disimone@hunimed.eu) (18 h, 12h co-chair with dr. Guarano and dr. Bresciani, 6 hours individual)

**Faculty:**

Prof. Paolo Emanuele Levi-Setti, MD, [paolo.levi\\_setti@hunimed.eu](mailto:paolo.levi_setti@hunimed.eu) (6h co-chair with dr. Cirillo)

Dr. Andrea Busnelli, MD, [andrea.busnelli@hunimed.eu](mailto:andrea.busnelli@hunimed.eu) (12 h)

Dr. Federico Cirillo, MD, [federico.cirillo@humanitas.it](mailto:federico.cirillo@humanitas.it) (12h)

Dr. Annalisa Inversetti, MD, [annalisa.inversetti@hunimed.eu](mailto:annalisa.inversetti@hunimed.eu) (12h)

Dr. Alice Guarano, MD, [alice.guarano@sanpiox.humanitas.it](mailto:alice.guarano@sanpiox.humanitas.it) (6h co-chair with Prof. Di Simone)

Dr. Gianluigi Bresciani (6 h co-chair with prof. Di Simone)

**Tutors:**

Stefano Acerboni<sup>1</sup>, Anna Maria Baggiani<sup>2</sup>, Gianluigi Bresciani<sup>3</sup>, Marinella Dell'Avanzo<sup>1</sup>, Inversetti Annalisa<sup>1</sup>, Guarano Alice<sup>1</sup>, Alessia De Mita<sup>2</sup>, Alessandra Drovanti<sup>2</sup>, Valentina Immediata<sup>2</sup>, Valeria Scolaro<sup>2</sup>, Cristina Specchia<sup>2</sup>, Elena Zannoni<sup>2</sup>.

<sup>1</sup> Division of Obstetrics and Gynecology, Humanitas S. PioX, Dir. Dr. Alessandro Bulfoni

<sup>2</sup> Division of Gynecology and Reproductive Medicine, Humanitas Research Hospital, Dir. Prof. Paolo Emanuele Levi Setti

<sup>3</sup> Division of Gynecology, Humanitas Research Hospital, Dir. Dr. Domenico Vitobello

## **Objectives**

*The course aims at acquainting the student with the varied aspects of medical care for women, giving an up-to-date knowledge about gynecological and obstetrical diseases, their diagnosis and treatment. Formal teaching lessons will include an interactive part and will be accompanied by professionalizing activities with the assistance of tutors.*

*Students should become able to correctly perform gynecological and obstetrical anamnesis, physical examination of the gynecological/obstetrical patient, to organize a diagnostic workout and a therapeutic plan for gynecological and obstetrical diseases. They should also acquire basic knowledge about the practical treatment of obstetrical complications during pregnancy and delivery. Students should also become able to recognize and discuss the basis of bioethical conflicts in women's health care.*

## **Contents**

### **1. Anatomy and Gynecological Endocrinology 1 h. 14:00 - 18:00**

- 1.1. Brief summary of woman's pelvic anatomy (Dr A. Busnelli) h. 14:00-15:00*
- 1.2. Malformations of the female reproductive tract (Dr. A. Busnelli) h. 15:00-16:00*
- 1.3. Hypothalamic-pituitary-ovarian axis: central and peripheral regulation of the menstrual cycle (Dr. A. Busnelli) h. 16:00 – 17:00*
- 1.4. Amenorrhea and diagnostic workout of menstrual disorders (Dr. A. Busnelli) h. 17:00-18:00*

### **2. Gynecological Endocrinology 2 h. 14:00 - 18:00**

- 2.1. Precocious ovarian insufficiency and fertility preservation (Dr. A. Busnelli) h. 14:00 -15:00*
- 2.2. Ovarian reserve (Dr. A. Busnelli) h. 15:00 – 16:00*
- 2.3. Hyperandrogenism, PCOS and the metabolic syndrome (Prof. PE Levi-Setti) h 16:00-17:00*
- 2.4. Dysmenorrhea and Premenstrual Syndrome (Dr.A. Busnelli) h 17:00 - 18:00*

**3. Reproductive Gynecology 1 h. 14:00-18:00**

- 3.1. *Gametogenesis in the ovary and in the testis (Dr. F. Cirillo) h. 14:00-15:00*
- 3.2. *Fertilization, embryo development and implantation (Dr. F. Cirillo) h. 15:00-16:00*
- 3.3. *Diagnostic workout of couple's infertility and treatment (Dr. F. Cirillo) h. 16:00-17:00*
- 3.4. *Medically assisted reproduction (MAR) (Dr. F. Cirillo) h. 17:00-18:00*

**4. Reproductive Gynecology 2 & Benign gynecology ) h. 14:00-18:00**

- 4.1 *Endometriosis (dr. A. Busnelli) h. 14:00 - 15:00*
- 4.2 *Family planning and contraception (Dr. F. Cirillo) h. 15:00-16:00*
- 4.3 *Menopause and its complications (Dr. A. Guarano)h 16:00 - 17:00*
- 4.4 *Placentation and Normal fetal development (Dr. F. Cirillo) h. 17.00 – 18.00*

**5. Diagnostic in gynecology and Benign gynecology**

- 5.1. *Ultrasound in gynecology (Dr A. Busnelli) h. 14:00-15:00*
- 5.2. *Benign ovarian cysts (Dr.A. Busnelli) h. 15:00-16:00*
- 5.3. *Endoscopy in gynecology (Dr. A. Busnelli) h. 16.00 – 17.00*
- 5.4. *Uterine myomas and polyps (Dr.A. Busnelli) h. 17:00-18:00*

**6. Urogynecology, Infections and Ectopic pregnancy h. 14:00 - 18:00**

- 6.1. *Uterine prolapse (Dr. F. Cirillo) h. 14:00 -15:00*
- 6.2. *Urinary incontinence in the woman (Dr. F. Cirillo) h: 15:00-16:00*
- 6.3. *Pelvic inflammatory disease (Dr. F. Cirillo) h. 16.00 – 17.00*
- 6.4. *Ectopic pregnancy (Dr. F. Cirillo) h. 17:00-18:00*

**7. Gynecologic Oncology 1 h. 14:00-18:00**

- 7.1. *Cancer of the ovary (Dr. G. Bresciani) h. 14:00-15:00*
- 7.2. *Trophoblast diseases (Dr. G. Bresciani) h. 15:00-16:00*
- 7.3. *Endometrial cancer (Dr. G. Bresciani) h. 16:00-17:00*
- 7.4. *Preneoplastic lesions and cancer of the vulva (Dr. G. Bresciani) h. 17:00-18:00*

**8. Gynecologic Oncology 2 h. 14:00-18:00**

- 8.1. *Screening of pre-neoplastic lesions of the lower genital tract (Dr. G. Bresciani) h. 14:00-15:00*
- 8.2. *Cancer of the cervix (Dr.G. Bresciani) h. 15:00-16:00*
- 8.3. *Benign diseases of the breast (Dr. F. Cirillo) h. 16:00-17:00*
- 8.4. *Cancer of the breast (Dr. F. Cirillo) h. 17:00-18:00*

**9. Obstetrics 1 h.14:00-18:00**

- 9.1. *Prenatal care and physiologic changes in pregnancy (Dr.ssa A Guarano) h. 14:00-15:00*
- 9.2. *Spontaneous and voluntary abortion (Prof. Levi-Setti) h. 15:00-16:00*
- 9.3. *Recurrent pregnancy loss (Prof. N. Di Simone) h. 16:00-17:00*
- 9.4. *Autoimmune diseases in pregnancy (Prof. N. Di Simone) h.17:00-18:00*

**10. Obstetrics 2 h. 14.00-18:00**

- 10.1. *Prenatal diagnosis and screening for aneuploidy (Dr. A. Guarano) h. 14:00-15:00*
- 10.2. *Fetal growth disorders and ultrasound diagnosis (Dr.A. Inversetti) h. 15:00-16:00*
- 10.3. *Screening for infection in pregnancy (TORCH) (Dr. A. Inversetti) h. 16:00-17:00*
- 10.4. *Ultrasound diagnosis of infections in pregnancy (Dr. A. Inversetti) h. 17:00-18:00*

**11. Obstetrics 3 h. 14:00-18:00**

- 11.1. *Twin and multiple pregnancy (Dr. A. Guarano) h. 14.00-15.00*
- 11.2. *Premature rupture of membranes (PROM) (Dr. A. Guarano) h.15:00-16:00*
- 11.3. *Threatened preterm labor(Dr. A. Inversetti) h.16:00-17:00*
- 11.4. *Preterm birth (Dr. A. Inversetti) h. 17:00-18:00*

**12. Obstetrics 4**



- 12.1. *Hypertensive disorders in pregnancy, pre-eclampsia and eclampsia (Dr. A. Inversetti) h. 14:00-15:00*
- 12.2. *Gestational diabetes (Prof N Di Simone) h. 15:00-16:00*
- 12.3. *Placenta previa and accreta spectrum (Dr. A. Inversetti) h. 16:00-17:00*
- 12.4. *Abruptio placentae (Prof. N. Di Simone) h. 17:00-18:00*

### **13. Obstetrics 5 h. 14:00 – h 18:00**

- 13.1. *Stages of physiological labor and delivery. Fetal monitoring during labor Dr.A. Inversetti h. 14:00-15:00*
- 13.2. *Management of near term and post term pregnancy, induction of labour (Dr. A. Inversetti) h. 15:00-16:00*
- 13.3. *First stage dystocia (Dr.A. Inversetti) h. 16:00-17:00*
- 13.4. *Second stage dystocia (Dr. A. Inversetti) h. 17.00 – 18.00*

### **14. Obstetrics 6 h. 14:00-h 18:00**

- 14.1. *Shoulder dystocia (Dr. A. Inversetti) h. 14.00 – 15.00*
- 14.2. *Cesarean section and operative vaginal delivery (Dr. A. Inversetti) h. 15:00-16:00*
- 14.3. *Emergencies in Obstetrics: uterine rupture, uterine inversion (Dr. A. Inversetti) h. 16:00-17:00*
- 14.4. *Post-partum hemorrhage (Prof. N. Di Simone) h. 17:00-18:00*

## **Teaching Methods**



Each hour of lesson will be divided as follows:

- 30-40 min front lecture (including 5 min of key, take-home messages)
- 10-15 min of questions and answers
- 10 min interval

Students are encouraged to actively participate to the lectures with questions and comments.

### **Professionalizing activities**

Professionalizing activities will be registered by the student on a Clinical Logbook, signed by tutors. The schedule of professionalizing activities appears in a separate document.

## **Assessment**

Learning tests on specific parts of the program will be periodically performed throughout the course, in order to let students estimate the reached knowledge level. The final exam will be **written with the option of the oral part**, and will include **10 brief multiple choice questions (1 point each) and 4 open questions (5 points each) with short answer** on topics treated in the course. Students will have two hours of time for the written part. **Optional oral exam (one question) will follow the written part**. The final evaluation will be the mean of the points obtained by the 2 parts of the exam. Oral exam is mandatory to reach the laude. Performing the oral exam can lead to gain or lose a maximum of 3 points. Choosing the wrong answer in the written part does not cause a decrease in the total amount of points.

## **Texts**

1. *Current Diagnosis and treatment: Obstetrics and Gynecology*, Nathan, Laufer, Roman, DeCherney, 12<sup>th</sup> Edition, McGraw-Hill Education/Medical
2. *Beckmann and Ling's, Obstetrics and Gynecology*, Beckmann, Ling, Herbert, Laube, Smith, Casanova, Chuang at al., 7<sup>th</sup> Edition, [Wolters Kluwer](#)
3. *Williams Obstetrics and Gynecology*, Cunningham, Leveno, Bloom, Dashe, 25<sup>th</sup> Edition, McGraw-Hill Education/Medical
4. *Lippincott, Williams and Wilkins – The American College of Obstetrics and Gynecology*.

All slides and videos shown during the lessons will be available for further consultation by students.