

#### **Degree in Midwifery**

Integrated Teaching: Maternal Childcare Obstetrics SSD: MED/03, MED/38, MED40, MED/47, M-PSI/08 Credits: 9 Responsible Professor: Sofia Colaceci E-mail: sofia.colaceci@unicamillus.org	
MODULES: Obstetrical-gynecological nursing sciences SSD: MED/47 Number of Credits: 2	
Professor: Maria Bordoni CFU: 1 Professor: Sofia Colaceci CFU: 1	E-mail: maria.bordoni@unicamillus.org E-mail: sofia.colaceci@unicamillus.org
MODULE: Medical Genetics SSD: MED/03 Number of Credits: 1 Professor: Cinzia Ciccacci	E-mail: <u>cinzia.ciccacci@unicamillus.org</u>
MODULO: Ginecology and Obstetrics SSD: MED/40 Number of Credits: 2	
Professor: Giuseppina Liuzzi	E-mail: giuseppina.liuzzi@unicamillus.org
MODULO: General and Specialised Pediatrics SSD: MED/38 Number of Credits: 2 Professor: Michele Miraglia Del Giudice E-mail:michele.miragliadelgiudice@unicamillus.org	
MODULO: Clinical Psychology SSD: M-PSI/03 Number of Credits: 2	
Professor: Armando Piccinni	E-mail: armando.piccinni@unicamillus.org

#### PREREQUISITES

The pre-requisites for the students are knowledge of: anatomy and physiology of the female reproductive system; physiological changes during pregnancy.

## LEARNING OBJECTIVES

At the end of this course, students will be able to describe the main affections of neonatal age, childhood and adolescence, explaining their prevention, diagnosis and treatment. Moreover, the students will be able to describe the main infections during pregnancy, with particular reference:



to the prevention of the same, to the interpretation of the laboratory results and to the possible diagnostic-therapeutic pathways and the main concepts on the inheritance of genetic diseases and basic elements of prenatal and postnatal diagnosis. Finally, students will achieve ability to use cognitive and intervention tools aimed at prevention, diagnosis and rehabilitation and psychological support activities and they will acquire advanced level skills to establish relevant characteristics of people, families and groups.

## LEARNING OUTCOMES

The specific learning outcomes of the program are coherent with the general provisions of the Bologna Process and the specific provisions of EC Directive 2005/36/EC. They lie within the European Qualifications Framework (Dublin Descriptors) as follows.

At the end of this teaching, students will be able to:

# Knowledge and Understanding

- describe the characteristics of preterm labor and the preterm infant

- describe the diagnosis of neonatal hypoglycemia and its treatment

- describe the diagnosis, treatment and prevention of 1) group B streptococcal infection, and 2) the meconium aspiration syndrome

- describe the procedures of Gynecological and Obstetric's Emergecies management in perioperative practice

- explain the main inheritance models of non mendelian disorders: mitochondrial diseases, multifactorial diseases

- describe the main biological mechanisms that cause hereditary diseases
- describe genetic counselling, prenatal and postnatal testing
- explain the major kinds of genetic testing and their proper use
- describe the importance of infections in pregnancy and in the pre and perinatal period

- explain the methods of prevention, diagnosis and possible treatment regarding the main infections during pregnancy

- describe information on bacterial, viral and fungal infections

- describe information on vaccinations during pregnancy

- describe all problems related to neonatal age, childhood and adolescence from a preventive and diagnostic point of view

Applying Knowledge and Understanding

-apply the principles of midwifery to selected cases, problems and a variable range of situations -use the tools, methodologies language and conventions of midwifery to test and communicate ideas and explanations

Communication Skills

-present the topics orally in an organized and consistent manner

-use a proper scientific language coherent with the topic of discussion

## Making Judgements

-recognize the importance of an in-depth knowledge of the topics consistent with a proper education



-identify the importance of a proper theoretical knowledge of the topic in the clinical practice

## COURSE SYLLABUS

BORDONI

Gynecological and Obstetric's Emergecies management in theatre

CICCACCI

Genomic Imprinting

Mitochondrial inheritance: mitochondrial DNA, pattern of inheritance

Multifactorial inheritance: polimorphisms, susceptibility genes, gene-environment interaction, association studies

Pharmacogenomics and Personalised Medicine

Genetic tests and Counselling. Prenatal and postnatal testing

Diagnosis of genetic diseases: some examples

Epigenetics and nutrigenetics. Outlines

COLACECI

Preterm birth and preterm infant: clinical course and care plan.

Neonatal hypoglycemia: prevention, signs, diagnosis and treatment.

Group B streptococcal infection in pregnancy: prevention, diagnosis, treatment and neonatal outcomes.

Meconium aspiration syndrome and main postnatal disorders after birth.

liuzzi

Importance of infections during pregnancy

Infections of the fetus: pathogenesis, efficiency of transmission of microorganism from mother to fetus, diagnosis of infection in the pregnant woman, diagnosis of infection in the newborn infant Obstetric factors associated with infections in the fetus and newborn infant

Obstetric factors associated with infections in the fetus and new

Bacterial infections in pregnancy

Viral infections

Protozoan and fungal infections in pregnancy

PROM and infections

Neonatal sepsis

Benefit and risks of human milk

Clinical pharmacology of anti-infective drugs in pregnancy

Vaccinations in pregnancy

MIRAGLIA

Respiratory diseases:

Adenoid hypertrophy, pharyngitis, laryngitis and epiglottis, bronchiolitis, asthma, pneumonia, cystic fibrosis.

Digestive diseases:

Gastro-esophageal reflux, gastroenteritis, celiac disease, inflammatory bowel diseases

Urinary tract infections

Endocrinology

Obesity, hyper and hypothyroidism, puberty, adolescence, diabetes Infectious diseases:



Measles, chicken pox, rubella, other exanthematous diseases, scarlet fever, tbc, pertussis, mononucleosis, encephalitis, meningitis Neonatology: newborn care, neonatal screening, normal and pathological newborn. Allergic diseases: food allergies, urticaria, atopic dermatitis, allergic rhinitis. Feeding in the first year of age Anemia PICCINNI General principles of psychology: What is psychology? History of psychology. Main psychological perspectives social psychology Neuroscientific foundation of psychology: The brain: principles of anatomy and of physiology; Functions, emotions and behaviors Higher mental functions: Thinking, Language, Intelligence, Consciousnes, Learning, Memory Lifespan development: Prenatal psychology, Developmental psychology, Childhood Psychology, Adulthood Psychology, Death psychology Personality Theories Psychopathological disorders: Anxiety disorders, Mood disorders, Psychotic disorders

## COURSE STRUCTURE

The course consists of 126 hours of classroom teaching, composed of frontal lessons, working groups and interactive learning activities.

## COURSE GRADE DETERMINATION

MODULES OF BORDONI, COLACECI, LIUZZI, MIRAGLIA

The exam will be written (multiple choice question test and short-answer questions) and oral. Students who obtained an evaluation higher than or equal to 18/30 are admitted to the oral exam. The oral exam is compulsory and aims to confirm or increase the evaluation obtained in the written exam.

The final evaluation of the integrated course will be oral. The evaluation criteria for the oral exam will be acquired knowledge (range score: 0-8), making judgements (range score: 0-8), communication skills (range score: 0-7), learning skills (0-7). The students must be able to demonstrate their knowledge on the contents, to organize in a critical way the topics established by the program, using an appropriate language.

## **OPTIONAL ACTIVITIES**

Students can request optional workshops to deepen some specific topics.

## **READING MATERIALS**

-Mayes' Midwifery. Macdonald, Johnson. Elsevier. 2017 -Heather Nixon, MD, Lisa Leffert, MD; Anesthesia for cesarean delivery; Aug 2019 -Goodman, Cynthia Spry; Essentials of Perioperative Nursing; Jones & Bartlett Publishers, 2016



-Ragusa, Crescini; Urgenze ed Emergenze in Sala Parto; Piccin; October 2016

- -Nell Tharpe, Caity Byrne; The Midwife as Surgical First Assistant; 2015
- -Medical Genetics by Jorde, Elsevier Edition
- -Infezioni in gravidanza di Nicola Rizzo e Gianluigi Pilu, 2012
- -Elementi Essenziali di Pediatria per i corsi di laurea triennali G.V. Zuccotti Edizioni Esculapio
- -Current Diagnosis and Treatment Pediatrics Abzug MJ McGraw-Hill Editor's
- -General Psychology: Briefer Course Editor: Kessinger Pub Co
- -Didactic material (lessons in pdf, papers, etc.) delivered by the Professors