

#### **Course Degree in Nursing**

Teaching: MATERNITY AND CHILDCARE NURSING SSD Course: med/40, med/38, med/47, med/45 CFU: 6 Director: Romina Belsito email: <u>romina.belsito@unicamillus.org</u> office hours (by appointment): wednesday from 15 to 16

Module: OBSTETRIC AND GYNECOLOGICAL NURSING SCIENCE SSD : MED 47 CFU: 1 Professor: Gessica Trivelli e-mail: gessica.trivelli@unicamillus.org office hours (by appointment): wednesday from 15 to 16

Module: GENERAL AND SPECIALIZED PEDIATRICS SSD Course MED38 Credits: 1 Professor's Name: Angela Mastronuzzi e-mail: <u>angela.mastronuzzi@unicamillus.org</u> office hours (by appointment): wednesday from 15 to 16

Module: GYNECOLOGY SSD Course MED/40 Credits: 2 Professor's Name: Carlo Ticconi e-mail: <u>carlo.ticconi@unicamillus.org</u> office hours (by appointment): wednesday from 15 to 16

Module: NURSING SCIENCE NEONATOLOGY AND PEDIATRICS SSD Course: MED/45 Credits: 2 Professor's Name: ROMINA BELSITO e-mail: <u>romina.belsito@unicamillus.org</u> office hours (by appointment): wednesday from 15 to 16



#### PREREQUISITES

Basic concepts about:

- Basics of human anatomy, genetics and physiology, with regard to functions of main organs and apparatus.
- Basic knowledge of biology/embryology, immunology and infectious diseases.
- anatomy of the female pelvis are needed
- immune response and specific antigen, knowledge of genetics, anatomy and physiology.
- nursing care and interpersonal skills with the patient and his family

#### LEARNING OBJECTIVES

Aim of the Teaching is:

- to provide students with knowledge on the principles of physiology about pregnancy, delivery and the post-natal phase, and so will be able to ensure the proper nursing care required for women, babies and families.
- to identify signs and symptoms of main pathologies affecting pregnancy, including spontaneous miscarriage, alterations of the delivery phase and to enlarge care to a woman admitted in obstetrics and gynecology ward.
- to provide students with knowledge on preventive and diagnostic aspect related to health and illness during the neonatal age, childhood and adolescence. Identify the conditions that require a nurse intervention, students must be able to identify.
- to provide students with knowledge on basic notions of obstetrics and obstetric pathology (basic notions of assistance to spontaneous delivery) and basic notions of benign and malignant pathology in gynecology, with particular attention to useful surgical instrumentation for the most common procedures in gynecology and obstetrics.
- Identify physical, psychological and social needs and diagnose women's need for help, integrating theoretical knowledge with practical knowledge to meet them with scientific and technical expertise.
- Identify the needs of obstetric-gynaecological assistance that require preventive and curative skills, in specific areas of gynaecology and ultraspecialist obstetrics such as infertility also immunological, metabolic diseases and autoimmune diseases.
- Evaluate clinical manifestations related to immediate, intermediate and late physiological and pathological pregnancy in hospitalisation. Carry out assistance planned according to the adoption of guidelines verified and verifiable on the basis of scientific evidence (ebm/ebc)
- Demonstrate professional and decision-making skills in designing and implementing health and sex education interventions for women, couples and communities.
- Demonstrate the ability to design, implement and evaluate staff training measures and to contribute directly to training and updating on their own professional profile
- to provide students with knowledge on nursing assistance to the newborn and educational/relational skills to the family. These objectives will be achieved through



lectures and interactive teaching activities, designed to facilitate learning and improve the ability to address and solve the main questions of Pediatric Nursing.

## LEARNING OUTCOMES

# knowledge and understanding

At the end of the teaching, the student will be able to:

- Know the main signs and symptoms of pregnancy;
- Recognize the main premonitory and identificatory signs of pregnancy's pathology;
- Know and describe the main examination required in pregnancy;
- Know and describe the main pregnancy's pathology;
- Know and describe labor and delivery's phases;
- Describe the process of nursing care during the hospitalization regarding the main pathology of pregnancy, labor and delivery;
- Describe the process of nursing care required during hospitalization of women in labor, during and after delivery;
- Know how to take care of woman during breastfeeding;
- Recognize signs that define a newborn healthy or pathological;
- Describe the care of women during miscarriage.
- neonatal age, childhood and adolescence from a preventive and diagnostic point of view
- Know the clinical and functional anatomy of the female genital apparatus
- Know basic concepts of fetal development and growth
- Know the obstetric semiotics
- Know about obstetric conduct during physiological pregnancy
- Know basic concepts of prenatal diagnosis
- Know basic concepts about abortion and ectopic pregnancies
- Know basic concepts of assistance in spontaneous birth, childbirth and puerperium
- Know what kind of assistance to implement in the event of postpartum bleeding
- Know concepts of contraception
- Know the benign diseases of the uterus and ovaries, as well as how to treat these conditions
- Know the oncological pathologies of the female genital apparatus and basic concepts of the treatment of such conditions
- Knowledge of fertilization and the nesting of the embryo
- Knowledge of the physiology of pregnancy and fetal-placental units
- Knowledge of the main perinatal screening methods, invasive and non-invasive prenatal diagnosis
- Knowledge of pregnancy diseases with particular regard to related diseases (miscarriages), endocrinopathies, infectious diseases and autoimmune diseases
- Recognize "normal" infant from pathological infant.
- Recognize the main pathologies of pediatric age.
- Recognize main features of a normal growth from pathologic growth.



- Know the basic diagnostic tools of exanthematous diseases in pediatric ag
- Have a basic knowledge of syndromic pediatric patients and their needs
- Follow basic knowledge of pediatric oncohematology.

#### Applying knowledge and understanding

At the end of the teaching the student will be able to:

- Use the acquired knowledge to take care of a woman during pregnancy, labor and delivery at the moment of hospital admission, following a nursing approach and in collaboration with other healthcare providers.
- Use the acquired knowledge to take care of a woman during a miscarriage at the moment of hospital admission, following a nursing approach and in collaboration with other healthcare providers.
- identify the conditions that require nurse support and plan essential interventions towards the main health problems
- To assist in spontaneous physiological birth; autonomously prepare an operating field for the most common gynecological interventions both in laparotomic and laparoscopic surgery.
- Use the knowledge acquired for the in-depth study of the aspects relating to the specific field for the student who will dedicate the activity of professional activity

## **Communication skills**

At the end of the teaching, the student will be able:

- to communicate to the child and his parents
- to express themselves using scientific terminology in an appropriate and adequate manner

## Making judgements

At the end of the teaching, the student will be able:

- to use the acquired knowledge to discriminate between physiology or pathology regarding a woman in pregnancy, labor and delivery and regarding the newborn.
- Recognize the patient who needs attention and nursing intervention
- Master the appropriate use of the drugs.
- Understand the basic principles of disease prevention at various ages.
- Make general evaluations and judgements concerning treated issues and topics

#### **COURSE SYLLABUS**

## **OBSTETRIC AND GYNECOLOGICAL NURSING SCIENCE**

#### Physiology of pregnancy:

- diagnosis of pregnancy
- main physiological modifications



• clinical care to ensure the well-being and evolution of pregnancy.

# Main pregnancy's pathology:

definition, symptoms and care required for:

- causes of bleeding (abruptio placenta, placenta praevia and other causes)
- cases of preterm labor and delivery (cervical incontinence and premature rupture of membranes)
- pre-eclampsia and eclampsia
- gestational diabetes

## Labor and delivery:

- diagnosis of labor
- phase of labor delivery and proper care
- cardiotocography
- main emergency during labor and delivery (shoulder dystocia, cord prolapse, uterine atony and post-partum hemorrhage)

## Physiological newborn and first care

## Puerperium and feeding:

• definition and care

## Miscarriage:

- Definition
- classification and nursing care of the woman during hospitalization
- Respiratory diseases: Adenoid hypertrophy, pharyngitis, laryngitis and epiglottis, bronchiolitis, asthma, pneumonia, cystic fibrosis.
- Digestive diseases:Gastro-esophageal reflux, gastroenteritis, celiac disease, inflammatory bowel diseases

## GENERAL AND SPECIALIZED PEDIATRICS

- Normal and pathologic infant;
- main pediatric diseases of respiratory system: bronchial asthma, bronchiolitis, acute otitis,
- major pediatric diseases of digestive tract: infant colic, acute gastroenteritis, celiac disease, chronic inflammatory diseases;
- major pediatric urinary tract diseases: urinary tract infection, glomerulus poststreptococcal nephritis;
- pediatric fever and febrile convulsion, childhood infectious exanthems and vaccinations;
- basic skills of pediatric oncohematology;
- main syndromic condition of pediatric age; physiological and pathological puberty.



## **GYNECOLOGY AND OBSTETRIC**

## **Gynecology:**

- Anatomy of the female genital apparatus
- Biological bases of reproductive function, ovarian and menstrual cycle
- Gynecological, clinical and instrumental diagnostics (gynecological objective examination, oncological cytodiagnostics,
- colposcopy, gynecological ultrasound, radiological examinations in gynecology, hysteroscopy, gynecological laparoscopy)
- Menstrual changes; anovulation; dysmenorrhea
- Puberty and menopause
- Amenorrhea, hirsutism and polycystic ovary syndrome
- Contraception (hormonal; intrauterine devices; sterilization)
- Phlogosis of the female genital system (vaginitis, pelvic inflammatory disease)
- Pelvic floor disease (urinary incontinence, uterine-vaginal prolapse)
- Sexually transmitted diseases
- Endometriosis
- fibroids
- Diagnosis and therapies of infertility. Assisted reproduction techniques
- Screening of cervicocarcinoma; HPV, Pap smear, dysplastic lesions
- Carcinoma of the uterine cervix: diagnosis, staging and therapy
- Benign pathology of the endometrium (polyps, hyperplasia)
- Carcinoma of the endometrium and uterine sarcoma
- Ovarian cysts
- Ovarian tumors (benign, borderline and malignant)
- Vulvar dystrophic lesions and carcinoma of the vulva
- Trophoblastic neoplasms (hydatiform mole, choriocarcinoma)
- Trophoblast and autoimmune related diseases
- Main gynecological interventions (myomectomy, hysterectomy, appendix interventions, laparoscopy)

## **Obstetrics**:

- Fertilization and planting
- Surveillance protocol of physiological pregnancy
- Ultrasound in pregnancy: basic principles and notions in obstetric ultrasound diagnostics
- Assessment of fetal well-being: cardiotocography; fetal biophysical profile; Doppler velocimetry
- Labor and delivery
- Physiology of the puerperium
- Prenatal diagnosis: diagnostic techniques (amniocentesis, villocentesis, cordocentesis) and screening.
- Puerperium and breastfeeding



- Infections in pregnancy: viral infections (cytomegalovirus, rubella, parvovirus, HIV), toxoplasmosis, syphilis
- Diabetes in pregnancy
- Hypertension in pregnancy
- Thyroid disease in pregnancy
- Multiple pregnancy
- Preterm birth
- Post-term pregnancy
- Extrauterine pregnancy
- Abortion
- Law 194
- Placenta previa and placental detachment
- Amniotic fluid disorders (oligohydramnios, polydramnios)
- Alloimmunization Rh, ABO isoimmunization

## NURSING SCIENCE NEONATOLOGY AND PEDIATRICS

- Role of nurse in caring the newborn, child and the family
- Assessment of the newborn and infant
- Normal term newborn
- Neonatal screening
- Infant hygiene
- Newborn infant unit
- Vital parameters, venous and capillary blood draw
- Mother/baby care for breastfeeding and artificial feeding
- Newborn care in the first hours after birth: primary resuscitation, umbilical vein catheterization
- The neonatal intensive care unit (NICU)
- Systems assessment and management of disorders
- Care to premature infants, phototherapy, neonatal exchange transfusion, infectious diseases
- Vascular access
- Baby Cooling

## COURSE STRUCTURE

The module of Obstetric and Gynecological Nursing Science is structured in 14 hours of classes, for a maximum of 4 hours each, based on the academic calendar. Also, the student should integrate the learning process with individual study, including the elaboration of a nursing care plan regarding a specific caseload presented by the professor. (Max 1 page).



The module of General and Specialized Pediatrics is structured in 14 hours of frontal instruction, divided into 2 or 3 hours on the basis of the timetable for the academic year. Students will be free to have verbal interventions during the lessons, in order to stimulate mutual debate and discussion amongst the group.

The module of Gynecology is divided into 2 or 4 hours lessons based on the academic calendar for a total of 28 hours of frontal teaching.

The module of Neonatology and Pediatrics is structured in 28 hours of frontal teaching Lectures / discussions, student presentations, audiovisuals, written assignments. Attendance is mandatory for at least 75% of the hours.

# **COURSE GRADE DETERMINATION**

The exam of the Teaching of Maternity and Childcare Nursing is comprised of an oral exam of the modules of OBSTETRICS, GENERAL AND SPECIALIZED PEDIATRICS, GYNECOLOGY, NEONATOLOGY AND PEDIATRICS, whose mark is an integral part of the Teaching.

The knowledge and ability to understand, the ability to apply knowledge and understanding, the autonomy of judgment and the communication skills of the student will weigh in the final score as follows 30%, 30%, 30% and 10%, respectively.

## **OPTIONAL ACTIVITIES**

In addition to the lectures, the student will be given the opportunity to participate in seminars, conferences and courses. The topics of the activities will not be a part of the exam.

## **READING MATERIALS**

- Sue Macdonald, Gail Johnson "Mayes' Midwifery" Elsevier, 15<sup>th</sup> edition, 2017
- 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
- Perricone C., Shoenfeld Y. Mosaic of Autoimmunity: the novel factors of autoimmune diseases Academic Press, 2019
- Di Carole K (2014). Comprehensive Neonatal Nursing Care (5th Ed.). New York: Springer Publishing Company.
- Nicki L. Potts, Barbara L Mandleco (2012). Pediatric Nursing: Caring for Children and Their Families (3<sup>rd</sup> Ed.) New York: Delmar Cengage Learning.
- Nelson Essentials of Pediatrics by Kliegman Robert M., Marcdante Karen; 8° edition; 2019



• The Washington Manual of Pediatrics, by Andrew J White - Lippincott Manual; February 11, 2016