

DEGREE IN MIDWIFERY

Integrated Teaching: ANESTHESIA AND INTENSIVE CARE PRINCIPLES OF PHARMACOLOGY APPLIED TO OBSTETRICS

SSD: BIO/14, MED/17, MED/18, MED/40, MED/41

Credits: 5

Responsible Professor: [Diego Fiume](#)

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Module: Anaesthesiology

SSD: MED/41

Number of Credits: 1

Professor: [Diego Fiume](#)

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Module: General Surgery

SSD: MED/18

Number of Credits: 1

Professor: Francesco Giovinazzo

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Module: Pharmacology

SSD: BIO/14

Number of Credits: 1

Professor: Massimo Persia

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Module: Infectious Diseases

SSD: MED/17

Number of Credits: 1

Professor: [Giuseppina Liuzzi](#)

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Module: Gynaecology and Obstetrics

SSD: MED/40

Number of Credits: 1

Professor: [Luca Cipriano](#)

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PREREQUISITES

The prerequisites for the students are knowledge of: basic concepts of biochemistry, anatomy and physiology, anatomy and physiology of the female reproductive system, and physiological changes during pregnancy. Knowledge of microorganisms and of the immune response is needed, as well as the main mechanisms of inflammation and infection.

LEARNING OBJECTIVES

The goal of the Integrated Course is to provide the students with indepth knowledge on: main surgical diseases and their treatment, management about pre and postoperative care of surgical patients, pharmacological, general and peripheral anesthesia concepts necessary in case of surgical and obstetric emergencies.

Moreover, the Integrated Course aims to provide students with knowledge of main infectious diseases with specific regard to the basic principles of epidemiology, pathogenesis, clinical diagnosis and therapy, as well as primary and secondary prevention tools.

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

- Understand main surgical diseases
- Understand the pathophysiology of surgical diseases
- Be confident with and understand the nursing management of diagnosis and therapy of main surgical diseases
- Be able to use specific nursing knowledge to deal with a surgical patient
- Describe the main obstetric emergencies from diagnosis to treatment
- Discuss commonly used medications in relation to their action, use, side effects and implications in obstetrics
- Identify drugs used in emergencies
- Compare gender, racial and ethnic differences in response to medication administration, action and response
- Delineate midwife strategies to optimize the administration of a reliable treatment
- Know the classification of the main bacterial, viral and protozoan infections
- Describe the epidemiological principles of diseases, with special attention to the different geographical contexts
- Explain infection transmission mechanisms
- Understand the diagnostics for pathogens and immune response
- Know and describe the main therapeutic classes for prevention and treatment
- Describe isolation and infection control measures

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 indepth 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

SURGERY

- Surgical Basic Principles: Shock
- Preoperative Surgery: Principles of Preoperative and Operative Surgery, Surgical Infections and choice of antibiotics, Minimally invasive surgery
- Trauma and Critical care: Management of acute trauma
- Head and Neck: Thyroid, Parathyroid
- Breast: Diseases of the breast, breast tumors
- Endocrine Surgery: Endocrine pancreas, Adrenal glands, MEN
- Esophagus: Hiatal Hernia and GERD, Esophageal motility Disorders, Esophageal neoplasms
- Abdomen: Hernias, Stomach, Small Intestine, Acute Intestinal Hemorrhages, Acute Abdomen, Appendix, Colon and Rectum, Anus, The Liver, Biliary Tract, Exocrine pancreas, Spleen
- The Chest: Lung, Lung neoplasms
- Gynecology Surgery
- Vascular Surgery
- Pediatric surgery

PHARMACOLOGY

- Drug Therapy During Pregnancy and BreastFeeding
- Drug Therapy in Pediatric Patients
- Drug Therapy in Geriatric Patients
- Local Anesthetics
- General Anesthetics
- Opioid (Narcotic) Analgesics, Opioid Antagonists, and Nonopioid Centrally Acting Analgesics
- Pain Management in Patients with Cancer
- SedativeHypnotic Drugs
- Drugs for Hypertension
- Drugs for Heart Failure
- Drugs for Angina Pectoris
- Anticoagulant, Antiplatelet, and Thrombolytic Drugs
- Prophylaxis of Coronary Heart Disease: Drugs That Help Normalize Cholesterol and Triglyceride Levels
- Drugs for Deficiency Anemias
- Drugs for Diabetes Mellitus

ANESTHESIOLOGY

- Preparation of environment and patient to surgical procedures
- Use of anesthetics. Management of preanesthesia phase
- Intra and postsurgical phase
- Management of central and peripheral venous lines and surgical drainages
- Management of surgical wounds and postsurgical pain
- Monitoring in Intensive Care Unit
- Organ failure. Physiopathology and treatment
- Mechanical Ventilation
- Extracorporeal removal techniques
- The patient in shock
- Stupor and coma

INFECTIOUS DISEASES

- General aspects on Infectious Diseases
- Infection and infectious disease
- The chain of transmission
- The body's defenses against infectious diseases
- Diagnostic procedure and guiding concepts of therapy, types of isolation
- Globalization and infectious diseases
- The Infectious syndromes (epidemiology, etiology, clinical, diagnostic and diagnostic and therapeutic aspects)
 - Sepsis and endocarditis
 - SIRS, sepsis, septic shock
 - Acute respiratory syndrome
 - Acute neurological syndrome
 - Meningitis and infectious encephalitis
 - Diarrheal syndrome
 - Acute jaundice syndrome
 - Febrile exanthematous syndromes
 - Feverish syndromes returning from the tropics
 - HIV infection / AIDS
 - Viral hepatitis

GYNECOLOGY

Obstetric emergencies: obstetricgynaecological interventions; changes in the course of labour, arrest of labour and uterus rupture; malpositions and malpresentations; cord prolapse; shoulder dystocia; disseminated intravascular coagulation.

COURSE STRUCTURE

The course consists of 70 hours of classroom teaching, composed of frontal lessons, working groups and interactive learning activities.

COURSE GRADE DETERMINATION

The final exam will be oral and it will be communicated at the beginning of the lessons together the didactic materials necessary to the preparation for the final evaluation.

The oral exam will focus on the program and will assess the student's knowledge and mastery of specific scientific language.

The evaluation criteria considered will be: acquired knowledge, independent judgment, communication skills and learning skills. The exams will be assessed according to the following criteria:

< 18 Fail	The candidate possesses an inadequate knowledge of the topic, makes significant errors in applying theoretical concepts, and shows weak presentation skills.
18-20	The candidate possesses a barely adequate and only superficial knowledge of topic, limited presentation skills, and only an inconsistent ability to apply theoretical concepts.
21-23:	The candidate possesses an adequate, but not indepth, knowledge of the topic, a partial ability to apply theoretical concepts, and acceptable presentation skills.
24-26	The candidate possesses a fair knowledge of the topic, a reasonable ability to apply theoretical concepts correctly and present ideas clearly.
27-29	The candidate possesses an indepth knowledge of the topic, a sound ability to apply theoretical concepts, good analytical skills, clear argumentative clarity and an ability to synthesize.
30-30L	The candidate possesses an indepth knowledge of the topic, an outstanding ability to apply theoretical concepts, a high level of argumentative clarity, as well as excellent analytical skills, and a welldeveloped ability to synthesize and establish interdisciplinary connections.

OPTIONAL ACTIVITIES

Students can request optional workshops to deepen some specific topics.

READING MATERIALS

GYNECOLOGY:

- Pescetto, De Cecco, Pecorari, Ragni. Ginecologia e ostetricia. 2017
- Trattando di Scienza ed Arte della Professionalità Ostetrica. Costantini W. Piccin. Ed. 2021.

ANAESTHESIOLOGY:

- Guida al monitoraggio in area critica.GD Giusti, Maggioli Editore

PHARMACOLOGY:

- Book of pharmacology chosen by the student

OTHER MODULES:

- Didactic material delivered by the Professors.