1. OVERVIEW

Subject Area	Optional Clinical Placement VIII: ANAESTHESIOLOGY AND REANIMATION
Degree	MEDICINE
School/Faculty	BIOMEDICAL AND HEALTH SCIENCES
Year	6º
ECTS	3 ECTS
Type Language(s)	OPTIONAL
Delivery Mode	SPANISH
Semester	ON CAMPUS
Academic year	Six-monthly

2. INTRODUCTION

The Optional Clinical Placement VIII subject is part of the Human Clinical Training module. It takes place in the 6th year. This is a complementary clinical placement in the Clinical Department of Anaesthesiology and Reanimation and the Pain Management Unit at the Hospital Infanta Sofia.

Anaesthesiology and Reanimation is a medical speciality which offers integral health care for: patients undergoing surgical interventions or painful explorations, patients with critical surgical or medical pathology and patients undergoing pain management.

The aim of the clinical training in anaesthesiology and reanimation is to learn about the risk and clinical improvement possibilities for patients who are undergoing surgical interventions. It also involves techniques and methods for making the patient insensitive to pain and protecting them from perioperative aggression, maintaining vital signs and homoeostasis in any medical or surgical pathology, until the risk to life has passed.

3. SKILLS AND LEARNING OUTCOMES

Basic Skills (CB, by the acronym in Spanish):

- CB3: Students will develop an ability to gather and interpret relevant data (usually within their study area) to form opinions which include reflecting on relevant social, scientific or ethical matters.

- CB4: Students can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.

General Skills

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- CG13 (C13): Obtain and elaborate a clinical history report with all relevant information.
- CG15 (C15): Have the ability to carry out an initial diagnosis and establish a well-founded approach to making a diagnosis.
- CG16 (C16): Understand and treat situations which are an immediate threat to life and any others which require immediate attention.
- CG17 (C17): Establish the diagnosis, prognosis and treatment, applying the principles based on the most reliable information and clinical safety conditions.
- CG18 (C18): Indicate the most suitable therapy for the most common acute and chronic processes, including patients in the terminal phase.

Cross-curricular skills (CT, by the acronym in Spanish):

- CT6: Analysis and problem solving:
- CT9: Ability to put knowledge into practice, using the skills acquired in the classroom to mock situations based on real life experiences that occur in the relevant profession.
- CT10: Independent learning

Specific skills (CE, by the acronym in Spanish):

- CE3.2.1: Know how to do a full anamnesis focused on the patient and with a view to diverse pathologies, interpreting its meaning.
- CE3.2.2: Know how to perform a physical examination of the systems and apparatus, as well as a psychopathological assessment, being able to interpret the results.
- CE3.2.5: Decide on a plan of action, focusing on the needs of the patient and their social and family environment, all the while in line with the patient's signs and symptoms.

Learning outcomes (RA, by the acronym in Spanish):

- RA1: Know how to do a full anamnesis focussed on the patient and with a view to diverse clinical syndromes, interpreting its meaning.
- RA2: Know how to perform a physical examination of the systems and apparatus, as well as a psychopathological assessment, being able to interpret the results.
- RA3: Have the ability to carry out an initial diagnosis, evaluate the need for complementary tests and establish a well-founded approach to making a diagnosis.
- RA4: Establish a plan of action focused on the patient's needs and their family and social environment.

The following table shows how the skills developed in the subject area match up with the intended learning outcomes:

Skills	Learning outcomes
CB3, CG13, CT10, CE3.2.1	RA1
CB3, CG14, CT10, CE3.2.2	RA2
CB4, CG15, CG17, CT10, CT6	RA3
CB3, CB4, CG 18, CT9, CE 3.2.5	RA4

4. CONTENTS

PRACTICAL SEMINARS:

- I: Basics of Anaesthesia
  - History of anaesthesiology Types of anaesthesia
  - Physiology and monitoring
  - Pharmacology applied to at anaesthesiology
  - Pre-anaesthetic valuation, risk and professional responsibility (informed consent)
  - Circumstances associated with anaesthesiology:
    - Antibiotic prophylaxis
    - Complications
    - Managing the airway Difficult airway
    - Post-operative sickness and vomiting
    - Transfusion and alternatives
    - Allergy and anaesthesia
- II: Local anaesthesia
  - Pharmacology of local and adjuvant anaesthetics
  - Neuraxial anaesthesia Anatomy of the spinal canal
  - Fundamentals of neural stimulation and ultrasound
  - Peripheral nerve blocks of the upper and lower extremity Anatomy of the brachial plexus and lumbosacral spine
  - Thoracoabdominal wall blocks
  - Coagulation in local anaesthetics
  - Complications in local anaesthetics
- III: Perioperative and critical surgical care
  - Cardiac arrest. Basic and advanced cardiopulmonary reanimation.
  - Acute respiratory failure. Diagnosis and treatment. Mechanical ventilation.
  - Initial evaluation of a poly-trauma patient.
  - Acid-base and hydroelectrolyte balance disorders.
  - Fluid therapy.
  - Shock. Concept, pathophysiology, diagnosis and treatment.
  - Complications of anaesthesia.
- IV. Evaluation and treatment of acute and chronic pain
  - Fundamentals of pain.
  - Clinical aspects: types of pain, clinical and psychological evaluation
  - Treating pain – with and without drugs Interventional techniques
  - Clinical situations
  - Critical patient units and criteria for referral

TUTORED CLINICAL PLACEMENTS

5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

- Lectures: Theory presentations by the professor in the classroom encouraging debate and student participation.

- Experiential learning in tutored clinical placements. In the different hospital services: problem-solving in a practical context observing the tutor, being observed by the tutor, or with the tutor's supervision. Students will integrate themselves and participate in the activities performed in the healthcare units. The student activities will be programmed, tutor-assisted and assessed by the tutor.

6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

On campus:

Learning activity	Number of hours
AF.1 Theory/practical learning activities on-campus	7h
AF.2 Tutored clinical placements	67h
AF.3 Knowledge tests	1h
TOTAL	**75H**

7. ASSESSMENT

The assessment methods, plus their weighting in the final grade for the subject area, are as follows:

On-campus:

Assessment system	Weighting
Assessment of skills in clinical practice	25%
Participation in clinical practice	40%
Attitude in clinical practice	5%
Assessment workshops	30%

On the Virtual Campus, when you open the subject area, you can see all the details of your assessment activities and the deadlines and assessment procedures for each activity.

8. BIBLIOGRAPHY

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