

## 1. OVERVIEW

<b>Subject Area</b>	EMERGENCIES AND TOXICOLOGY
<b>Degree</b>	MEDICINE
<b>School/Faculty</b>	BIOMEDICAL AND HEALTH SCIENCES
<b>Ac. Year</b>	6º
<b>ECTS</b>	6 ECTS
<b>Type</b>	COMPULSORY
<b>Language(s)</b>	SPANISH
<b>Delivery Mode</b>	ON CAMPUS
<b>Semester</b>	YEARLY

## 2. INTRODUCTION

This is a compulsory subject belonging to the Human Clinical Training module and is taught yearly. This module is worth 101 ECTS + 82 (73 ECTS in tutored clinical placements and 9 ECTS in optional subjects). Human Clinical Training brings together all the knowledge, skills and attitudes students acquire throughout the degree programme. The Emergencies and Toxicology subject consists of 3 ECTS and 3 ECTS in clinical placements. To take this course, students must have passed at least 150 ECTS in the first years of the degree programme.

The overall objectives of this subject are:

- The aim of this subject is for students to acquire the knowledge of the aetiology, symptomatology, diagnosis, prognosis and treatment of:
  - o emergency pathologies and those of a toxicological nature.
- Teach how to draw up a clinical history of an emergency patient or of toxicological aetiology.
- Establish the diagnosis, prognosis and treatment of emergency care and toxicological pathologies, based on the most reliable information.
- Decide on and propose the suitable preventative measures in different clinical emergency and toxicology situations.

## 3. SKILLS AND LEARNING OUTCOMES

**Basic Skills (CB, as per the Spanish acronym):**

- CB2: Students can apply their knowledge to their work professionally and possess the necessary skills, usually demonstrated by forming and defending opinions, as well as resolving problems within their study area.
- 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.
- CB5: Students should possess the learning skills that enable them to continue studying in a way that will be self-directed or independent for the most part.

#### **General skills:**

- CG1 Recognise the essential parts of being a medical professional, including ethical principles and legal responsibilities, together with how to provide a patient-centred service.
- CG2 Understand the importance of such principles to benefit patients, society and the profession, with particular attention paid to professional secrecy.
- CG 3 Know how to apply the principle of social justice to professional practice and understand the ethical implications of health in a constantly changing world.
- CG4 Develop professional practice taking into account patient autonomy, beliefs and culture.
- CG 5 Be aware of the need to maintain and update professional skills, paying special attention to continuous self-learning of emerging knowledge and to discover new products and techniques with the aim of improving quality.
- CG 6 Carry out professional activity with regard to other health professionals, acquiring teamwork skills.
- CG9 Understand and recognise the effects, mechanisms and manifestations of a disease on the structure and functioning of the human body.
- CG10 Understand and recognise the causal agents and risk factors which determine health conditions and the development of a disease.
- CG12 Understand the principles of action, indications and effectiveness of therapeutic interventions based on the available scientific evidence.
- CG13 Obtain and elaborate a clinical history report with all relevant information.
- CG14 Perform a physical examination and mental health assessment.
- CG15 Have the ability to carry out an initial diagnosis and establish a well-founded approach to making a diagnosis.
- CG17 Establish the diagnosis, prognosis and treatment, applying the principles based on the most reliable information possible.
- CG18 Indicate the most suitable therapy for the most common acute and chronic processes, including patients in the terminal phase.
- CG19 Raise and propose the suitable preventative measures required for each clinical situation.
- CG20 Acquire sufficient clinical experience under supervision in hospital institutions, health centres or other healthcare institutions. This also involves basic knowledge of a patient-centred clinical approach and suitable use of tests, medicinal products and other healthcare system resources.
- CG21 Listen attentively, obtain and synthesise information regarding the problems troubling the patient and understand this information.
- CG22 Write clinical histories and other medical records in a way so they can be understood by other people.
- CG23 Communicate effectively and clearly, both orally and in writing, with patients, family members, media and other professionals.
- CG24 Establish good interpersonal communication which allows you to efficiently and

- empathetically connect with patients, family members, media and other professionals.
- CG26 Assume a role in the prevention and protection against diseases, injuries or accidents, together with the maintenance and promotion of health, both on an individual and community level.
- CG32 Know how to use information and communication technology in clinical, therapeutic, preventative and research activity.

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

- CT1. Communication: ability to engage in active listening, ask questions and respond in a clear and concise way, as well as to effectively express ideas and concepts. This includes concise and clear written communication.
- CT3: Teamwork: Ability to integrate and collaborate actively with other people, areas and organisations to reach common goals, evaluate and integrate contributions from the rest of the group members and create a good working environment.
- CT4: Adaptability: ability to detect, interpret and respond to a changing environment. Ability to equip themselves and work effectively in different situations and/or with different groups or individuals. This means adapting to change depending on circumstances or needs. It involves the confidence to take on crucial challenges on a personal or group level, maintaining a good physical and mental health to allow work to be carried out effectively.
- CT6. Problem solving: ability to solve an unclear or complex issue or situation which has no established solution and requires skill to reach a conclusion.
- CT7: Decision making: ability to choose between different options or methods to effectively solve different problems or situations.
- CT8: Planning and organization: ability to set objectives and choose the right means to fulfil them through the efficient use of time and resources.
- 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: the ability to govern your own development by choosing the most effective lines of action, strategies, tools and opportunities to independently learn and apply knowledge to practice.

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

- CE3.1.17 Recognise, diagnose and direct treatment of the main intoxications. Palliative medicine.
- CE3.1.20 Recognise, diagnose and manage situations which are life threatening.
- CE3.2.1 Know how to do a full anamnesis focused on the patient and with a view to diverse pathologies, interpreting its meaning.
- CE 3.2.2 Know how to perform a physical examination of the systems and apparatus, as well as a psychopathological assessment, being able to interpret the results.
- CE3.2.3 Know how evaluate adaptations to clinical parameters at different patient ages.
- CE3.2.6 Know how to perform basic and advanced life support manoeuvres.
- CE5.1.1 Complete a student work placement, involving independent clinical rotation and a final skills assessment in health centres, hospitals and other care facilities, which allows students to incorporate professional values, healthcare communication skills, clinical reasoning, clinical management and critical judgement. This also requires students to familiarise themselves with the most common health problems in Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics, Psychiatry and other clinical areas.

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

- RA 1 Recognise, diagnose and direct treatment of the main intoxications.
- RA 2 Recognise, diagnose and manage situations which are life threatening. Know how to diagnose a cardiac arrest and perform the basic cardiopulmonary resuscitation manoeuvres. Know the advanced life support manoeuvres.

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

Skills	Learning outcomes
CB2, CB3, CB4, CG1, CG2, CG3, CG4, CG5, CG6, CG9, CG 10, CG 12, CG13, CG 14, CG17, CG18, CG19, CG 20, CG21, CG 22, CG 23, CG 24, CG 26, CG 32, CT1, CT2, CT3, CT4, CT5, CT6, CT7, CT 8, CT 9, CT 10, CE3.1.17, CE3.2.1, CE 3.2.2, CE 3.2.3, CE5.1.1	RA 2 (2.37). Recognise, diagnose and direct treatment of the main intoxications.
CB2, CB3, CB4, CG1, CG2, CG3, CG4, CG5, CG6, CG9, CG 10, CG 12, CG13, CG 14, CG17, CG18, CG19, CG 20, CG21, CG 22, CG 23, CG 24, CG 26, CG 32, CT1, CT2, CT3, CT4, CT5, CT6, CT7, CT 8, CT 9, CT 10, CE3.1.20, CE 3.2.1, CE 3.2.2, CE 3.2.6, CE5.1.1	RA 3 (2.38). Recognise, diagnose and manage situations which are life threatening. Know how to diagnose a cardiac arrest and perform the basic cardiopulmonary resuscitation manoeuvres. Know the advanced life support manoeuvres.

## 4. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

- Problem-based learning: Presentation of problems, reorganising into small groups, literature analysis, analysis of scientific texts and documents, symposiums and presentations, directed debates, specialised individual and collective tutorials, and reaching a consensus.
- Problem-based learning geared towards clinical reasoning: Presentation of problems, reorganising into small groups, literature analysis, analysis of scientific texts and documents, symposiums and presentations, directed debates, specialised individual and collective tutorials, and reaching a consensus.
- Case studies and problem solving: approach and solving cases and problems either as an individual or in small groups.
- Specialised seminars: literature research and debate on scientific data in small groups.
- Lectures: Classroom presentations by the professor on basic theory, encouraging debate and student participation.
- Case study method: presentation and discussion of clinical cases in small groups.
- Skills learning in the classroom and simulation environments: Practical work with IT programs, anatomical models, human dissection and standardised patients.
- Experiential learning in supervised 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.

## 5. CONTENTS

### EMERGENCIAS AND TOXICOLOGY

Topics
TOPIC 1. Emergency services.
TOPIC 2. Migraines. Managing dizziness, syncope and vertigo,
TOPIC 3. Coma patients.
TOPIC 4. Delirium and confusional syndrome.
TOPIC 5. Neurological emergencies.
TOPIC 6. Cardiac emergencies I.
TOPIC 7. Cardiac emergencies III.
TOPIC 8. Vascular emergencies.
TOPIC 9. Respiratory emergencies.
TOPIC 10. Digestive and abdominal emergencies. Gastrointestinal bleeding. Gastrointestinal bleeding.
TOPIC 11. Urological emergencies.
TOPIC 12. Acute kidney failure, hydroelectrolyte imbalances and acid-base disorders.
TOPIC 13. Sepsis.
TOPIC 14. Shock, anaphylaxis and urticaria-angioedema.
TOPIC 15. Urgent endocrinal disorders.
TOPIC 16. Caring for polytrauma and burns patients:
TOPIC 17. Toxicology. General principles.
TOPIC 18. Intoxications due to drugs.
TOPIC 19. Intoxications due to drug abuse.
TOPIC 20. Intoxications due to artificial and natural environmental agents.

## 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	32
AF.2 Directed learning activities	10
AF.3 Independent working	25
AF.4 Clinical placements	75
Tutorials	6
Knowledge test	2
<b>TOTAL</b>	<b>150</b>

## 7. ASSESSMENT

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

	Assessment system	Weighting
<b>THEORY (50%)</b>	Continuous assessment	10%
	Final assessment exam	40%
<b>PRACTICAL PART (50%)</b>	Attitude (rubric)	5%
	Clinical practice (rubric)	20%
	ECOE	25%

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

The reference work for the follow-up of the subject is:

### EMERGENCIES AND TOXICOLOGY:

#### Reference bibliography

- Manual de Protocolos y Actuación en Urgencias. Complejo Hospitalario de Toledo- SESCAM 5ª Edición, reimpresión de 2021. Coordinador Agustín Julián Jiménez. ISBN 978-84-18351-42-6.
- Corres González J, Vicente Bártulos A. **PROMIR: Radiología y Urgencias 2022-2023**, 2ª ed. Madrid: Editorial Médica Panamericana; 2022