

Academic Year/course: 2021/22

## 26771 - Dermatology, Immunopathology and Toxicology

### Syllabus Information

**Academic Year:** 2021/22

**Subject:** 26771 - Dermatology, Immunopathology and Toxicology

**Faculty / School:** 104 - Facultad de Medicina

**Degree:** 304 - Degree in Medicine

**ECTS:** 9.0

**Year:** 3

**Semester:** Second semester

**Subject Type:** Compulsory

**Module:**

### 1. General information

### 2. Learning goals

### 3. Assessment (1st and 2nd call)

### 4. Methodology, learning tasks, syllabus and resources

#### 4.1. Methodological overview

The learning process that has been designed for this subject is based on the following:

For the training of students, two fundamental types of activities will be carried out:

- 1. Face-to-face activities in large and small groups:
  - 1.1 Lectures
  - 1.2 theoretical-practical seminars, with clinical case realization
  - 1.3 Clinical practices in smaller groups.
  - 1.4 Workshops.
- 2. Non-classroom activities, in which the student will be the main actor:
  - 2.1 Clinical case realization by the student (ADD).
  - 2.2 Self-assessment with solutions provided by teachers (ADD).
  - 2.3 Collection of documentation by the student throughout the course (publications, reports and clinical records, photographs, videos, preparation and creation of clinical cases, training material, etc.).

#### 1. Dermatology and Venereology.

This block has 4 credits (ECTS) equivalent to 100 hours, of which 45% are attended (45 hours) and 55% are non-attended (55 hours)

The distribution of classroom hours is as follows:

- LARGE GROUPS (THEORETICAL CLASSES) (45%) 20,25 hours
- SMALL GROUPS: 45% 20,25 hours
- PROBLEMS AND CASES: 10 HOURS
- PRACTICAL WORK: 2 HOURS
- WORKSHOPS: 2.25 HOURS

- CLINICAL PRACTICES: 6 HOURS
- EVALUATION (10%) 4.5 hours
- Total 45 hours.

## 2. Immunopathology.

This block has 2 credits (ECTS) equivalent to 62.5 hours, of which 28 hours are face-to-face and 33 hours are personal work of the student and are non-presential

### PRESENTIAL TEACHING

LARGE GROUPS (THEORETICAL CLASSES) (45%) .... 11 hours

### SMALL GROUPS:

- Workshops ..... 8 hours
- Group work ..... 9 hours

### NON-PRESENTIAL ACTIVITY

NON-PRESENTIAL PERSONAL WORK (33 hours).

This schedule is for the student's autonomous work dedicated to the bibliographical study, preparation of problem cases and workshops to improve group discussion, writing preparation and presentation to the large group.

## 2. Clinical Toxicology.

The program offered to the student to help achieve the expected results includes the following activities:

- LARGE GROUPS (THEORETICAL CLASSES) (45%) (14 hours), with the development of the contents referred in the program
- Presentation of two clinical cases of acute intoxication, with a description of the diagnostic and therapeutic tools.
- Practice in the toxicology laboratory (3 hours) in small groups (maximum 5 students per group) where you will see the different techniques used in the toxic analysis (immunoenzymatic analysis, gas chromatography and mass spectrometry)

## 4.2. Learning tasks

The course includes the following learning tasks:

Large group sessions: one-hour lectures in which the theoretical contents necessary and general of the subject are presented to develop the competences. It is in the general interest of teachers to encourage participation.

1. Dermatology
2. Immunopathology.
3. Clinical Toxicology

Working in small groups: during the semester of activity, students distributed in 12 groups of 10-20 students (according to semester planning) will perform tutored tasks according to the following plan:

Division by study groups of:

1. Dermatology
2. Immunopathology.
3. Clinical Toxicology

Activities in small groups:

- Clinical and Laboratory Practices: Face-to-face activities in the hospital and clinic units and Laboratory.
- Workshops: Carrying out mainly practical activities with the active participation of the students.
- Seminars: Troubleshooting of clinical cases.
- Preparation of documents and/or portfolios in printed and digital format.
- Tutorials: The student will be able to carry out personal tutorials requesting through the internal mail of the subject. To this end, a time slot should be agreed at the beginning of the course.
- Incorporation of materials made to the web and to the ADD and that are considered elements of consultation for all the components of the course.
- Regarding the implementation of Clinical Practices, (in which they will work with real patients) and Laboratory Practices (Toxicology), students are reminded of the regulations of the University of Zaragoza on Prevention of Occupational Hazards and Confidentiality:
- Every student will be informed about the risks that the practice of this subject can carry out, as well as if dangerous products are handled and what to do in case of an accident, and must sign the commitment to comply with the working and safety standards for To carry them out. For more information, consult the information for students of the Unit of Prevention of Occupational Risks: <http://uprl.unizar.es/estudiantes.html>

- All students who perform practical activities in which they manage personal data or the patient's medical history is obliged to keep the confidentiality of the same.

### 4.3. Syllabus

The course will address the following topics:

PROGRAM:

1. DERMATOLOGY:

	CONTENTS	HOURS
<b>1.1 INTRODUCTION TO THE DERMATOLOGY</b>	<ul style="list-style-type: none"> <li>• Nomenclature of Skin Lesions: Primary and secondary clinical lesions.</li> <li>• Dermatopathology: The Basics.</li> </ul>	1,25 hours
<b>1.2 INFECTIOUS SKIN DISEASES.</b>	<ul style="list-style-type: none"> <li>• Bacterial infections of the skin.</li> <li>• Mycobacterial infections.</li> <li>• Mucocutaneous mycoses.</li> <li>• Dermatoses of viral origin.</li> <li>• Parasitic skin diseases.</li> </ul>	3,5 hours
<b>1.3. SEXUALLY TRANSMITTED DISEASES.</b>	<ul style="list-style-type: none"> <li>• Syphilis.</li> <li>• Chancroid.</li> <li>• Urethritis.</li> <li>• Lymphogranuloma venereum</li> <li>• Other Sexually Transmitted Diseases</li> <li>• Cutaneous manifestations of AIDS.</li> </ul>	1,5 hours
<b>1.4. CUTANEOUS, MUCOSAL AND ADNEXAL DISEASES PART (I).</b>	<ul style="list-style-type: none"> <li>• Psoriasis and other disorders of keratinization.</li> <li>• Lichen the ruber planus.</li> <li>• Pityriasis Rosea.</li> <li>• Eczema. Contact dermatitis. Atopic dermatitis. Seborrheic dermatitis.</li> <li>• Bullous Diseases</li> </ul>	4 hours
<b>1.5 CUTANEOUS, MUCOSAL AND ADNEXAL DISEASES PART (II)</b>	<ul style="list-style-type: none"> <li>• Urticaria.</li> <li>• Erythema multiform.</li> <li>• Adverse Drug Reactions.</li> <li>• Pigmentation disorders.</li> <li>• Acne. Rosacea. Alopecia.</li> <li>• Genodermatoses.</li> </ul>	3 hours
<b>1.6 DERMATOLOGY AND INTERNAL MEDICINE.</b>	<ul style="list-style-type: none"> <li>• Vasculitis. Panniculitis.</li> <li>• Connective diseases: Lupus eritematosus. Scleroderma. Dermatomyositis.</li> <li>• Cutaneous signs of systemic endocrine and metabolic disorders.</li> </ul>	3 hours
<b>1.7 ONCOLOGY</b>	<ul style="list-style-type: none"> <li>• Benign skin tumors.</li> <li>• Benign and malignant melanocytic skin tumors.</li> <li>• Epithelial skin cancer.</li> <li>• Vascular tumors.</li> <li>• Cutaneous lymphomas.</li> </ul>	4 hours

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|  | <ul style="list-style-type: none"> <li>• Histiocytoses.</li> <li>• Mastocytoses.</li> </ul> |  |
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Group work: during the six months, the students divided into 12 groups (as planning semester) tutored undertake tasks according to the following plan:

- Presential activities in clinical and hospitalary dependences.
- Workshops: Classroom activities with active student participation.
- Tasks: Solving problems of dermatological clinical cases.
- Delivery of the Portfolio document in print and digital format.
- Incorporation of materials made to the website dermatologia.unizar.es and ADD are considered elements of consultation for all components of the course.

## 2. IMMUNOPATHOLOGY:

Theoretical classes

1. The immune system. Structure and organization of the immune system. Immune system components. Organs, cells, immune system genes. Antigens.
2. Immune System Cells
3. Antigens. Immunoglobulins. Structure
4. Immunoglobulins. Function
5. Cytokines. Adhesion molecules. Ligands. Chemokines. Receptors
6. Immune response. HLA system. Presentation of antigens
7. Cell response. T lymphocytes
8. Cellular response. Lymphocytes B.
9. cytotoxic response. Cytotoxic lymphocytes. NK
10. Immune tolerance. The regulation of the immune response. Development, evolution, and aging of the immune system.

Workshops: This is a classroom activity with active student participation. At the end of the activity will require making a reflective sheet on the workshop conducted.

Contents:

Immunology Laboratory  
Allergies  
Autoimmune Diseases"

Group work: during the six months, the students divided into 12 groups (as planning semester) tutored undertake tasks according to the following plan:

- Assignment of a case problem for each group.
- Tasks: will be developed around a clinical problem and require prior student work to improve their participation in the meetings and thus active learning. The activity is based on group discussion regarding the case to prepare the presentation with PPT and memory of the appointed day activities. Knowledge needs to be revised for discussion and deepen the knowledge of specific aspects for a written document that improves the understanding of the problem and in which clinical reasoning with the current bibliography is presented.
- Delivery of the document in print and digital format, the large group presentation by one of the members of the group.
- Incorporation of materials made to the website of the subject in ADD and are considered elements of consultation for all components of the course.

## 3. TOXICOLOGY:

Theoretical classes (14 hours):

### GENERAL TOXICOLOGY

- Concept and evolution of Clinical Toxicology
- Toxicokinetic and Toxicodynamic processes
- Etiology and Epidemiological profile of acute poisoning
- Clinic and Diagnostic tools of acute poisoning
- General treatment of acute poisoning

SPECIAL TOXICOLOGY: Acute poisoning diagnosis and management by agents or families

- Drugs of abuse
- Psychoactive, analgesic, and antiarrhythmic medicines
- Irritant and toxic gases
- Pesticides
- Domestic products

- Toxins

Clinical case discussion (8 hours): presentation of two acute poisoning cases per student. It requires prior student work to improve their participation in the meetings and thus active learning

Laboratory activities (3 hours): Analytical techniques used in the toxicology laboratory

#### **4.4. Course planning and calendar**

##### **Calendar of face-to-face sessions and presentation of works**

MEDICINE. THIRD COURSE. SEMESTER SIXTH

PROGRAMMING LARGE GROUPS: BUILDING A

<https://medicina.unizar.es/tercer-curso#horario6>

#### **4.5. Bibliography and recommended resources**

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=26771>