

**COURSE DATA****DATA SUBJECT****Code:** 34467**Name:** Special pathological anatomy**Cycle:** Undergraduate Studies**ECTS Credits:** 4.5**Academic year:** 2026-27**STUDY (S)**

| Degree                    | Center                             | Acad. year | Period         |
|---------------------------|------------------------------------|------------|----------------|
| 1204 - Degree in Medicine | Facultat de Medicina i Odontologia | 3          | Second quarter |

**SUBJECT-MATTER**

| Degree                    | Subject-matter                        | Character  |
|---------------------------|---------------------------------------|------------|
| 1204 - Degree in Medicine | Diagnostic and therapeutic procedures | COMPULSORY |

**COORDINATION**

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**SUMMARY**

Anatomical Pathology is the branch of medicine which aims is to study the morphological, structural, functional and molecular-genetic changes of cells, tissues and organs that define the disease and explain its pathogenesis.

Anatomical Pathology appears with a double basic and translational aspect. It analyzes the biopathological processes involved in the pathogenesis of diseases and defines criteria for diagnosis and prognosis, as well as responses to therapeutic action thereof. Therefore, it incorporates to its activity all methods and techniques necessary for the development of these activities.

Anatomical Pathology is a medical specialty with welfare nature primarily oriented to diagnosis of diseases

Special Anatomical Pathology relies on General Anatomical Pathology addressing the specific study of lesions in organs and systems.



## PREVIOUS KNOWLEDGE

### RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

### OTHER REQUIREMENTS

It is recommended knowledge of Medical Biology, Histology, General Pathological Anatomy and Physiology.

## COMPETENCES / LEARNING OUTCOMES

### 1204 - Degree in Medicine

Acknowledge diversity and multiculturality.

Acquire properclinical experience in hospitals, health care centres and other health institutions, under supervision, as well as basic knowledge of clinical management focused on the patient and the correct use of tests, medicines and other resources available in the health care system.

Be able to formulate hypothesis, gather information and evaluate it critically in order to solve problems by following the scientific method.

Capacity for communicating with professional circles from other domains.

Conocer las características de los tejidos en las diferentes situaciones de lesión, adaptación y muerte celular. Inflamación. Alteraciones del crecimiento celular.

Consideration of ethics as a fundamental value in the professional practise.

Criticism and self-criticism skills.

Establish a good interpersonal communication which may allow professionals show empathy and talk to the patients efficiently,as well as to their relatives, the media and other professionals.

Establish the diagnosis, prognosis and treatment, applying principles based on the bestinformation available and on conditions of clinical safety.

In the professional practise, take a point of view which is critical, creative, constructive and research-oriented.

Is aware of the indications in biochemical tests, as well as haematological, immunological, microbiological, anatomical and pathological, and image tests.

Keep and use medical records which contain information about the patient for later analysis, preserving the confidentiality of personal data.

Know how to use IT in clinical, therapeutic and preventive activities, and those of research.

Know how to use the sources of clinical and biomedical information available, and value them critically in



order to obtain, organise, interpret and communicate scientific and sanitary information.

Knows the pathological anatomy of various body organs and systems.

Proper organisation and planning of the workload and timing in professional activities.

Team-working skills and engaging with other people in the same line of work or different.

Understand and recognise the effects, mechanisms and manifestations of diseases over the structure and function of the human body.

Understand and recognise the effects of growth, development and aging which affect individuals and their social environment.

Understand the importance and the limitations of scientific thinking in the study, prevention and management of diseases.

Working capacity to function in an international context.

## DESCRIPTION OF CONTENTS

### 1- THEORY.

1. Inflammatory heart pathology: endocarditis, myocarditis, pericarditis. Rheumatic fever. Aneurysms.
2. Head and neck pathology.
3. Esophageal pathology: inflammatory and neoplastic.
4. Gastric pathology: inflammatory and neoplastic.
5. Inflammatory bowel disease. Crohn's disease and ulcerative colitis.
6. Neoplastic pathology of the gastrointestinal tract.
7. Neoplastic pancreatic pathology.
8. Neoplastic hepatic pathology.
9. Inflammatory glomerular renal pathology.
10. Neoplastic pathology of the kidney and prostate.
11. Neoplastic pathology of the testis.
12. Uterine pathology: neoplastic (endometrium and myometrium) and non-neoplastic (endometriosis).
13. Neoplastic ovarian pathology.
14. Neoplastic breast pathology.
15. Neoplastic pathology of the endocrine system.
16. Thyroid pathology: inflammatory and neoplastic.
17. Neoplastic pulmonary pathology.
18. Neoplastic pathology of the central nervous system.

### 2- MYCROSCOPY PRACTICES.



1. Cardiac and pulmonary pathology.
2. Digestive and endocrine pathology.
3. Genitourinary pathology.
4. Pathology of the central nervous system.
5. Mammary pathology.
6. Review and exam.
7. A clinical practice it will consist of a 3 hours stay at one of the Anatomical Pathology Services of an University Hospital.

### 3- SEMINARS.

1. Pulmonar pathology with obstructive functional pattern. Emphysema, chronic bronchitis, asthma. Bronchiectasis and atelectasis.
2. Pulmonar pathology with restrictive functional pattern. Interstitial lung diseases. Pneumonia and pneumoconiosis.
3. Ischemic heart disease I.
4. Ischemic heart disease II.
5. Primary and secondary cardiomyopathies. Hypertrophic, dilated, and restrictive.
6. Amyloidosis.
7. Non-neoplastic pancreatic pathology.
8. Non-neoplastic hepatic pathology and cirrhosis.
9. Neoplastic pathology of the upper urinary tract and bladder I.
10. Neoplastic pathology of the upper urinary tract and bladder II.
11. Neoplastic pathology of the uterine cervix and papillomavirus.
12. Neoplastic pathology of the peripheral nervous system.
13. Central nervous system pathology: inflammatory.
14. Central nervous system pathology: degenerative.
15. B-cell lymphomas.
16. T-cell lymphomas.

### 4- REGULATED TUTORIALS.

## WORKLOAD

### PRESENCIAL ACTIVITIES

| Activity           | Hours        |
|--------------------|--------------|
| Theory             | 19,00        |
| Seminars           | 19,00        |
| Laboratory         | 11,00        |
| In-class tutorials | 4,00         |
| Clinical practice  | 3,00         |
| <b>Total hours</b> | <b>56,00</b> |

### NON PRESENCIAL ACTIVITIES

| Activity | Hours |
|----------|-------|
|----------|-------|



|   |              |
|---|--------------|
| Attendance at other activities  | 0,00         |
| Individual or group project   | 5,00         |
| Independent study and work  | 46,25        |
| Preparation of lessons  | 5,00         |
| Preparation for assessment activities                                 | 0,00         |
| Resolution of case studies  | 0,00         |
| Preparation of supplementary reports                                  | 0,00         |
| Preparation of the internship report and evaluation of the internship | 0,00         |
| <b>Total hours</b>  | <b>56,25</b> |

## TEACHING METHODOLOGY

- In the **theoretical lessons** (17 thematic units), the In the theoretical lessons, the teacher will expose, through master class, the most important concepts and contents in a structured way, to obtain the knowledge and skills that the students must acquire. The students' participation will be encouraged. The teaching materials used by the professor will be available, if he considers it appropriate, through the electronic resource Aula Virtual.

- Classroom practices: **seminars**. In small groups, the teacher will set specialized topics in depth, case studies, bibliography handling and current topics. The group work and the oral presentation will be boosted. It can be understood as "cooperative learning".

- **Laboratory practices** (microscopy practices) in small groups. They are focused on the consolidation of the theoretical knowledge by the practical application of this knowledge. The professor will present the objectives, will inform about the material management, will supervise the realization of the work and will help on the results interpretation.

- **Tutorials** in reduced groups where the students work in group about different topics coordinated by the professor and a posterior presentation, both written and oral, followed by a debate about the topic. It is a cooperative learning with a co-responsibility strategy.

The gender perspective, respect for diversity and the sustainable development goals (SDGs) will be incorporated into teaching, whenever possible.

## EVALUATION

**Theoretical assessment:** 50% of the final mark. Maximum value of 5 points: 50 multiple-choice test. It will be made by a written test about the contents of the program and which aim is to assess the acquisition of the knowledge. The content of the test will be the same of each group of the same subject.

**Practical assessment:** 50% of the final mark. It will be made by the continuous assessment of the participation on the different activities and the test that assesses the acquisition of the knowledge related to the general and specific competences:



- Mentored internship: maximum 0.8 points
- Clinical practice: maximum 0.2 points
- Microscopic practical: maximum 1 point. This will be assessed by means of a written exam in which 5 microscopic preparations explained during the course will be projected in the practical room, with each correct answer scoring 0.2 points.
- Seminar practice: maximum 3 points: Multiple-choice exam with 30 questions

The multiple-choice exams, by means of which the theoretical teaching and the seminars will be evaluated, will have 4 options of which only one will be correct. There will be a 0.1 point penalty for every 3 wrong answers. There will be no penalty for answers that are not answered.

A minimum of 2.5 points in both the theoretical and practical assessments is required to pass the course.

Throughout the course, continuous evaluation may be carried out, both in the theoretical and in the practical part. This evaluation is voluntary and can take different modalities. The score obtained will be added to the final grade, only for those students who have passed the theoretical exam and the practical exam.

Attendance at practical activities is mandatory. The student is considered to meet this requirement if he or she has attended a minimum of 80% of these activities and has adequately justified the impossibility of attending the remaining sessions due to the occurrence of a cause of force majeure. It will be essential to comply with this requirement to pass the subject.

Students are reminded of the importance of carrying out evaluation surveys on all the teaching staff of the degree subjects.

## REFERENCES

- Kumar V, Abbas AK, Aster JC. Robbins y Cotran -Patología estructural y funcional. 10<sup>a</sup> ed. Editorial Elsevier-Saunders, 2021.
- Buja L., Krueger G. (2006). Netter. Anatomía Patológica. 1<sup>a</sup> ed. Ed. Masson.
- Rubin E. (2006). Patología estructural. Fundamentos Clínico-patológicos en Medicina. 4<sup>a</sup> ed. Mc Graw-Hill Interamericana.
- Pardo-Mindán J. (1997). Anatomía Patológica. 2<sup>a</sup>ed. Ed. Mosby-Doyma.
- Ordi i Maja J. (1998). Anatomía patológica general. Ed. Universitat de Barcelona.
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- Kumar V, Abbas A, Aster JC y Deyrut AT. Robbins. Patología esencial. Ed. Elsevier, 2021.
- Kumar V, Abbas A, Aster JC. Robbins. Patología humana. Ed. Elsevier, 10<sup>a</sup> edición, 2018.
- e-Salut RESOURCES:
  - Clinical Key Student Medicine, Dentistry and Nursing [<https://uv-es.libguides.com/RecursosSalut>].
  - Access Medicine [[https://uv-es.libguides.com/Access\\_Medicina](https://uv-es.libguides.com/Access_Medicina)].



- Pan American Medical [[https://uv-es.libguides.com/Medica\\_Panamericana](https://uv-es.libguides.com/Medica_Panamericana)].