

# 26769 - Medical Specialties (Hematology and Oncology)

# **Syllabus Information**

Academic Year: 2019/20

Subject: 26769 - Medical Specialties (Hematology and Oncology)

Faculty / School: 104 - Facultad de Medicina

Degree: 304 - Degree in Medicine

**ECTS**: 6.0 **Year**: 3

Semester: First semester Subject Type: Compulsory

Module: ---

## 1.General information

- 1.1.Aims of the course
- 1.2. Context and importance of this course in the degree
- 1.3. Recommendations to take this course

# 2.Learning goals

- 2.1.Competences
- 2.2.Learning goals
- 2.3.Importance of learning goals
- 3.Assessment (1st and 2nd call)
- 3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

# 4. Methodology, learning tasks, syllabus and resources

# 4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as 30 theoretical sessions of 1 hour and 30 teaching sessions to small groups of 1 hour.

Also teaching the subject should include 80.5 hours of learning at home.

The contents of the lectures will be based on a previously recommended bibliography I adapted to the level of knowledge of the student.

# 4.2.Learning tasks

The course includes the following learning tasks:

#### Oncology

- Lectures (45%) 1.2 ECTS (30 hours)

-Large groups (45%), 0,6 ECTS (15 hours):

Theoretical

-Teaching small groups (45%), 0,6 ECTS (15 hours):

Seminars and Workshops

Hematology

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- Lectures (45%) 1,2 ECTS (30 hours)
  - -Large groups (45%), 0,6 ECTS (15 hours)

Theoretical

- Teaching small groups (45%), 0,6 ECTS (15 hours)

Seminars and Workshops

Common clinical practices:

Rotation during a week in the Departments of Hematology and Oncology in University Hospitals

All students will be informed about the risks that can occur in the practice of this subject, as well as if they handle dangerous products and what to do in case of an accident. They must sign the commitment to comply with the rules of work and safety to be able to perform them. For more information, consult the information for students of the Occupational Risk Prevention Unit: http://uprl.unizar.es/estudiantes.html.

-No face to face teaching (55%, 1.65 ECTS credits, 41.25 hours).

It is the autonomous work of the student dedicated to the study and preparation of practical cases for its presentation.

### 4.3.Syllabus

The course will address the following topics:

#### **ONCOLOGY**

#### Theoretical program

- Topic 1: Tumor disease: generalities. Epidemiology (incidence, mortality and survival), etiology and risk factors. Primary and secondary prevention. Long survivors.
- Topic 2: Diagnosis of cancer: Alarm symptoms. Confirmation of diagnosis. Extension study and classification by stages. Biomarkers and serum tumor markers.
- Topic 3: General principles of cancer treatment: therapeutic intention. Local and locoregional treatment. Systemic treatment. Multidisciplinary approach: tumor committees.
- Topic 4: Systemic treatment of cancer: Chemotherapy: knowledge, prevention and treatment of side effects.
- Topic 5: Systemic treatment of cancer: Hormonotherapy. Bases of the treatment. Side effects. Indications for prostate and breast cancer.
- Topic 6: Systemic treatment of cancer: Biological therapies and immunotherapy. Personalized medicine. The example of melanoma.
- Topic 7: Lung cancer: natural history, diagnosis, staging. Prognostic factors and molecular subtypes. Therapeutic strategy
- Topic 8: Breast cancer: natural history, diagnosis, molecular subtypes, staging. Prognostic and predictive factors response. Therapeutic strategy
- Topic 9: Colorectal cancer: natural history, diagnosis, staging. Predictive and predictive factors of response.
   Therapeutic strategy: cancer of the colon and rectum.
- Topic 10: Ovarian cancer: Natural history, diagnosis, staging. Prognostic factors and therapeutic strategy. Other gynecological tumors: cancer of the cervix and endometrium.
- Topic 11: Urological tumors (bladder, kidney, prostate). Natural history, diagnosis, staging. Prognostic factors and therapeutic strategy
- Topic 12: Gastric and hepato-biliopancreatic cancer: natural history, diagnosis, staging. Prognostic factors and therapeutic strategy.
- Topic 13: Tumors with the incidence in young people: germline tumors and sarcomas. Signs of alarm and suspicion.
- Topic 14: Tumors of head and neck and esophagus: natural history, diagnosis, staging. Prognostic factors and therapeutic strategy.
- Topic 15: Hereditary cancer and genetic counseling. Breast-ovarian syndrome and Lynch syndrome.

## **Seminars**

- 1.- Approach a tumor of unknown origin
- 2.- Oncological Emergencies: Syndromes of superior vena cava occlusion, spinal cord compression, intracranial hypertension.
- 3.- Paraneoplastic syndromes
- 4.- Pain and cancer.
- 5.- Continuous care: symptomatic and palliative treatment. Quality of life. Home care at the end of life. Terminal sedation Warning signs of pathological mourning

#### **HEMATOLOGY**

## Theoretical program

- 1.- Iron-deficiency anemia
- 2.- Anemia of chronic process; macrocytic and megaloblastic anemias
- 3.- Hemolytic anemias
- 4.- Bone marrow aplasia. Agranulocytosis
- 5. Chronic myeloproliferative syndromes
- 6.- Myelodysplastic syndromes
- 7.- Chronic lymphoproliferative syndromes
- 8.- Monoclonal gammopathies and multiple myeloma
- 9.- Lymphomas
- 10.- Acute leukemia
- 11.- Idiopathic thrombopenic purpura. Thrombotic thrombocytopenic purpura
- 12. Disseminated intravascular coagulation
- 13.- Prophylaxis and anticoagulant treatment
- 14.- Congenital and acquired thrombophilias

#### **Seminars**

- 1.- Clinical evaluation of the peripheral blood count. Attitude to the patient with anemia or polyglobulia, leukocytosis
  or neutropenia and thrombocytosis or thrombocytopenia.
- 2.- Assessment of hemostasis. Interpretation of the coagulation study. Prophylaxis and thromboembolic treatment. The patient with oral anticoagulant therapy (OAT).
- 3.- Attitude concerning the patient with lymph node enlargement and/or splenomegaly.
- 4.- Clinical scenarios that require the patient to be referred to the hematologist.
- 5.- Transfusion of blood products and transplantation of hematopoietic progenitors.

## 4.4.Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the Facultad de Medicina web <a href="https://estudios.unizar.es/estudio/ver?id=118">https://estudios.unizar.es/estudio/ver?id=118</a>

Lectures: 1 theoretical class/group during the appropriate period, in each subject.

Teaching of small groups: 60 hours spread over the school year in subgroups appropriate to the number of students.

### 4.5.Bibliography and recommended resources

http://psfunizar7.unizar.es/br13/eBuscar.php?tipo=a