Universidad Zaragoza

Academic Year/course: 2021/22

26769 - Medical Specialties (Hematology and Oncology)

Syllabus Information

Academic Year: 2021/22
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

2. Learning goals

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that they have achieved the expected learning outcomes through the following assessment activities.

Although the qualification of this matter is all together, the evaluation will be carried out individually in each of both of the two parts. Thus, the student must demonstrate that he has achieved the expected learning results through the following assessment activities:

In both issues, Oncology and Hematology, the evaluation follows the same structure: The evaluation will include a 30-question test with 4 distractors and a single true answer, without penalty for wrong answers. The cut-off point to succed is established in 18 valid responses. The questions, from the theoretical agenda and seminars, may include clinical cases in the same format as the rest of the test. The weight of this exam in the **final mark is 90%**.

The cut-off point for passing (grade of 5) is established in 18 valid questions in the final exam.

Attendance to at least 80% of seminars is required to pass the whole course. **Seminars account for 10%** of the final mark.

To succed the course the student has to pass both of the topics, Hematology and Oncology. A fail in one of the two may be compensated whenever the median is above 5 points and the lower mark is 4 or more points.

Final note is valid for one academic year.

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 34 theoretical sessions of 1 hour and 26 teaching sessions to small groups of up to 3 hour.
Also teaching the subject should include 90 hours of learning at home.

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

4.2. Learning tasks

The course includes the following learning tasks:

Oncology

- Lectures (30 hours)
  - -Large groups (17 hours):
    - Theoretical
  - -Teaching small groups (13 hours):
    - Seminars, Workshops and Tutorials

Hematology

- Lectures (30 hours)
  - -Large groups (17 hours):
    - Theoretical
  - -Teaching small groups (13 hours):
    - Seminars, Workshops and Tutorials

-No face to face teaching (50%, 4.5 ECTS credits, 90 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 (17 hours)

- 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: Esophageal and gastric cancer. Hepatic billiar and pancreatic cancer: natural history, diagnosis, staging. Prognostic factors and therapeutic approach.
- Topic 11: Urological tumors (bladder, kidney). Natural history, diagnosis, staging. Prognostic factors and therapeutic strategy

- Topic 12: Prostate cancer
- Topic 13: Ovarian cancer: Natural history, diagnosis, staging. Prognostic factors and therapeutic strategy. Other gynecological tumors: cancer of the cervix and endometrium.
- Topic 14: Tumors with the incidence in young people: germline tumors and sarcomas. Signs of alarm and suspicion.
- Topic 15: Skin cancer.
- Topic 16: Head and neck cancer. Brain cancer. Natural history, diagnosis, staging. Prognostic factors and therapeutic strategy
- Topic 17: Hereditary cancer and genetic counseling. Breast-ovarian syndrome and Lynch syndrome.

Seminars (13 hours)

- 1.- Approach a tumor of unknown origin
- 2.- Oncological Emergencies (1): Syndromes of superior vena cava occlusion, intracranial hypertension.
- 3.- Oncological Emergencies (2): Bone metastases, spine compression, hypercalcemia
- 4.- Oncological Emergencies (3): Fever in neutropenic patients
- 5.- Paraneoplastic syndromes
- 6.- Pain and cancer.
- 7.- 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 (17 hours)

- 1.- Anemia: General approach and clasification. Iron-deficiency anemia
- 2.- Anemia of chronic process; macrocytic and megaloblastic anemias
- 3.- Hemolytic anemias (I). Clasification. Congenital hemolytic anemiae.
- 4.- Hemolytic anemias (II). Acquired hemoytic anemiae. Autoimmune and mycroangiopatic anemiae.
- 5.- Bone marrow aplasia. Agranulocytosis
- 6- Leukemia. Concept and clasification.Acute leukemia
- 7.- Myelodysplastic syndromes
- 8.- Chronic myeloproliferative syndromes
- 9.- Chronic lymphoproliferative syndromes.
- 10.- Lymphomas. General approach and clasification. Non Hodgkin lymphoma B
- 11.- Non Hodgkin lymphoma T. Hodgkin lymphoma
- 12.- Monoclonal gammopathies and multiple myeloma
- 13.- Idiopathic thrombopenic purpura. Thrombotic thrombocytopenic purpura
- 14.- Plasma haemostasis. Congenital diseases of hemostasis. Haemophilia.
- 15.- Acquired diseases of hemostasis. Disseminated intravascular coagulation
- 16.- Congenital and acquired thrombophylia. Thromboembolic disease. Introduction to anticoagulant therapy
- 17.- Transfusional medicine

Seminars (13 hours)

- S1.- Clinical evaluation of the peripheral blood count.
- S2.- Interpretation of the coagulation study. Prophylaxis and thromboembolic treatment.
- S3.- The patient with lymph node enlargement and/or splenomegaly.
- S4.- Clinical scenarios that require the patient to be referred to the hematologist.
- S5.- 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:

https://medicina.unizar.es/horarios

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://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=26769