

26706 - Research and new technology

Syllabus Information

Academic Year: 2020/21

Subject: 26706 - Research and new technology

Faculty / School: 104 - Facultad de Medicina

229 - Facultad de Ciencias de la Salud y del Deporte

Degree: 304 - Degree in Medicine

305 - Degree in Medicine

ECTS: 6.0

Year: 1

Semester: First semester

Subject Type: Basic Education

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. It favors the acquisition of knowledge related to scientific methodology, history of medicine and medical information and documentation. A wide range of teaching and learning tasks are implemented, are implemented, such as:

Students are expected to participate actively in the class throughout the semester.

Classroom materials will be available via Moodle. These include a repository of the lecture notes used in class, the course syllabus, as well as other course-specific learning materials, including a discussion forum.

Further information regarding the course will be provided on the first day of class.

4.2.Learning tasks

This is a 6 ECTS (150 hours) course organized as follows

- **Lectures (30 hours):** The teacher will explain the contents of the syllabus, whose purpose is the transmission of knowledge and logical fundamentals of the subject.
- **Practice sessions (30 hours):** a) Sessions with exposition and **problem-solving tasks**, b) approaching practical cases resolved with programs and databases and related to **computer practices**, and c) **seminars** related to the

contents of the syllabus.

- **Directed work (5 hours).** In small groups, students will prepare and elaborate a report guided by the teacher. They will submit a written copy at the end of the course.
- **Evaluation** (5 hours)
- **Student autonomous work:** (90 hours)
- **Tutorials:** they will be voluntary and will take place preferably in the office of the teacher in the schedule destined for this type of educational activities
- In FCCSD,

Given the exceptional situation of the Academic Year 2020-2021, the large group teaching system will be online, that is to say, in a synchronic telematic system, by which teachers and students will be connected through technologies that allow interaction, such as Google Meet.

4.3.Syllabus

The course will address the following topics:

I. Methodology and Documentation

1. Methodology of scientific research (I)
2. Methodology of scientific research (II)
3. Methods of collecting information. Surveys.
4. Health information systems. Demographic sources
5. Scientific communication
6. Ethics in medical research and publication
7. Types of documents. Description, citing and bibliographic references.
8. Vancouver norms.
9. Scientific production and impact. Bibliometric indicators.
10. Types of articles. Original, reviews, editor letter, clinical case.
11. Information retrieval. Principles and foundations.
12. Evidence based medicine. Information sources.

II. History and theory of medicine

1. Origin and distribution of diseases
2. Historical evolution of health care
3. Structure and function of the hospital: main models
4. Historical genealogy of the health professions
5. Models of teaching and learning medicine
6. The morphological sciences
7. The functional sciences
8. The science of pathology and clinical
9. The therapeutic sciences
10. Scientific and social structure of physician-patient relations
11. Scientific language and medical terminology

III. Health system

1. Medicine as social and cultural system
2. Alternative Medicines: scientific and cultural structure
3. Coexistence of medical systems in developed societies
4. Itineraries for health recovering
5. Clinical record
6. Electronic clinical record and terms.
7. Health concept in Medicine
8. Social inequality and health
9. Medical registers and social inequality
10. Rationality and decision making

Computer Practices

- Data processors: Excel
- Data processors: SPSS
- Vancouver style
- Citations and bibliography: Mendeley reference manager
- Basic searching in PubMed. MeSH.
- Advanced searching in PubMed.
- Searching in Web of Science (WOS). Journal Citation Reports (JCR).
- Searching in Scopus, Scimago Journal Rank (SJR).
- Searching in Scholar Google and Plus Library Cochrane.
- Qualitative and quantitative research methodology. Social research.

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? website and the Degree website (<http://medicina.unizar.es>, <http://moodle2.unizar.es>)

4.5.Bibliography and recommended resources

http://biblos.unizar.es/br/br_citas.php?codigo=26706&year=2020