

## 26706 - Research and new technology

### Syllabus Information

**Academic Year:** 2019/20

**Subject:** 26706 - Research and new technology

**Faculty / School:** 104 -  
229 -

**Degree:** 304 - Degree in Medicine  
305 - Degree in Medicine

**ECTS:** 6.0

**Year:** 305 - Degree in Medicine: 1  
304 - Degree in Medicine: 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 documentation. A wide range of teaching and learning tasks are implemented, such as lectures, practice sessions, seminars, assignments, and autonomous work

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, test to assessment, 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 course organized as follows:

? **Lectures** (2,5 ECTS: 30 hours). Whole group sessions of 50 minutes each one. The teacher will explain the theoretical contents, which are available in advance on the virtual platform Moodle.

? **Practice sessions** (2 ECTS: 20 hours). Sessions where students work with case studies and problem-solving tasks.

? **Assignments** (1 ECTS: 10 hours). In small groups, students will prepare an essay about their bibliographical or biographical research, and elaborate an essay guided by the teacher. They will submit a written copy at the end of the course and will do an oral presentation.

? **Autonomous work** (0,5 ECTS: 10 hours). Time devoted to study the course contents and prepare the sessions and assignments.

### 4.3.Syllabus

The course will address the following topics:

#### LECTURES

##### I. Methodology and Documentation

1. Scientific and technological system (I+D+i)
2. Sources of information. Scientific communication
3. Bibliometric indicators and dissemination of publications
4. Methodology of scientific research (I)
5. Methodology of scientific research (II)
6. Methods of collecting information. Surveys
7. Health information systems. Demographic sources
8. Qualitative research: life stories

##### II. History and theory of medicine

09. Origin and distribution of diseases
10. Historical evolution of health care
11. Structure and function of the hospital: main models
12. Historical genealogy of the health professions
13. Professional profile of the doctor: a gender perspective
14. Models of teaching and learning medicine
15. The morphological sciences
16. The functional sciences
17. The science of pathology and clinical
18. The therapeutic sciences
19. Scientific and social structure of physician-patient relations
20. Scientific language and medical terminology
21. Patterns of the change and progress in science

##### III. Health system

22. Medicine as social and cultural system
23. Alternative Medicines: scientific and cultural structure
24. Coexistence of medical systems in developed societies
25. Itineraries for recovering health
26. Medical history and research
27. Health concept in Medicine
28. Social inequality and health
29. Rationality and decision making: MBE, guidelines and protocols
30. Medical registers and social inequality

#### PRACTICE SESSIONS

1. Types of scientific and medical documents and standards Vancouver
2. Types of medical journals. Analysis of the structure of the journal articles
3. Phases and types of research: analysis of the material and methods and bibliography. Bibliographic information management
4. Data processors I: Excel
5. Data processors II: SPSS
6. Bibliographic resources of the University of Zaragoza.

7. Medical databases from Spanish literature (IBECS, ISOC)
8. International bibliographic databases (PUBMED)
9. Scientific impact databases (WOS/JCR). Webs' information searchers (Google)
10. The computerized clinical history: types of documents and usefulness of the data.

#### **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://psfunizar7.unizar.es/br13/eBuscar.php?tipo=a>