

## 29315 - Epidemiology and Public Health

### Syllabus Information

**Academic Year:** 2020/21

**Subject:** 29315 - Epidemiology and Public Health

**Faculty / School:** 229 - Facultad de Ciencias de la Salud y del Deporte

**Degree:** 442 - Degree in Odontology

**ECTS:** 6.0

**Year:** 2

**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 lectures, theory sessions, practice sessions, and autonomous work and study.

It is recommended that students have passed the statistics course. From this point on, the learning and achievement of the results must be a consequence of the attendance and participation in the scheduled sessions and of the execution of the scheduled individual work.

#### 4.2.Learning tasks

This course is organized as follows:

- Lectures.
- Practice sessions.
- Autonomous work and study.

#### 4.3.Syllabus

This course will address the following topics:

- Introduction to Public Health

- Introduction to research methodology
- Introduction to Demography
- Epidemiology
- Health Information systems
- Health planning and programming
- Health policies and health organization
- Public Health and Oral Health Programmes

#### Detailed syllabus:

Themes of the theoretical program (lectures and theory sessions)  
(Approximately one hour each)

1. Introduction to public health (1).
2. Introduction to public health (2).
3. Introduction to the research methodology (1).
4. Introduction to the research methodology (2).
5. Demography (1).
6. Demography (2).
7. Introduction to epidemiology.
8. Measures of frequency, association, and impact (1).
9. Measures of frequency, association, and impact (2).
10. Measures of frequency, association, and impact (3).
11. Measures of frequency, association, and impact (4).
12. Types of epidemiological studies.
13. Descriptive epidemiological studies.
14. Experimental studies.
15. Cohort studies.
16. Case-control studies.
17. Valid statistical association and causal relationship (1).
18. Valid statistical association and causal relationship (2).
19. Valid statistical association and causal relationship (3).
20. Clinical epidemiology (1).
21. Clinical epidemiology (2).
22. Scientific publications.
23. Review of the scientific literature.
24. Health information systems.
25. Measuring health and disease: health indicators.
26. Epidemiological surveillance.
27. Study of outbreaks.
28. Health planning and programming (1).
29. Health planning and programming (2).
30. Health policies and health organizations. Types of health systems.
31. Health system in Spain.
32. Public health programmes.
33. Health promotion and education.
34. Epidemiology and prevention of communicable diseases (1).
35. Epidemiology and prevention of communicable diseases (2).
36. Epidemiology and prevention of non-communicable diseases (1).
37. Epidemiology and prevention of non-communicable diseases (2).
38. Oral health programmes.
39. Epidemiology and prevention in oral health.
40. Oral health in Spain.

#### Topics of practice sessions

(Approximately two hours each)

1. Sources of health information and the calculation of health indicators.
2. Demography.
3. Epidemiology: measures of frequency, association, and impact (1).
4. Epidemiology: measures of frequency, association, and impact (2).
5. Epidemiology: types of epidemiological studies.
6. Epidemiology: valid statistical association and causality.
7. Epidemiology: epidemiological surveillance and study of outbreaks.
8. Epidemiology: validity of diagnostic tests.
9. Review of the scientific literature (1).
10. Review of the scientific literature (2).
11. Synthesis and review of main concepts.

### **4.4.Course planning and calendar**

The schedule of the theoretical and practical sessions will be presented at the beginning of the semester.

Information concerning the timetable, classroom (<https://fccsyd.unizar.es/academico/horarios-y-calendarios>), office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the Faculty of Health and Sports Sciences website and Moodle.

Given the exceptional situation of the 2020-2021 academic year, if there is no availability of physical spaces to develop lectures according to the regulations approved by the University of Zaragoza, the online format will be adopted for both

master classes and seminars with the whole group. In this case, the lectures will be carried out electronically and synchronously by connecting through technologies such as Google Meet.

#### **4.5. Bibliography and recommended resources**

Link to bibliography: <http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=29315&Identificador=13039>