

## 29315 - Epidemiology and Public Health

### Syllabus Information

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**Academic Year:** 2019/20

**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 learning process that has been designed for this subject is based on the following:

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 programmed individual work.

### 4.2.Learning tasks

The program offered to the student to help him/her achieve the expected results includes the following activities:

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

### 4.3.Syllabus

The following general programme will be developed in the theoretical and practical sessions:

Introduction to Public Health  
Introduction to research methodology  
Introduction to Demography  
Epidemiology  
Health Information systems

#### Detailed programme:

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 organization. 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.

Themes of the practice sessions  
(Approximately two hours each)

1. Sources of health information and 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

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

Date and time	Topic
<b>Tuesday</b> <b>17/09/19</b> 17:00 - 20:00	0. Introduction to the subject. 1. Introduction to public health (1). 2. Introduction to public health (2).
<b>Monday</b> <b>23/09/19</b>	3. Introduction to the research methodology (1).

17:30 - 20:30	4. Introduction to the research methodology (2).
<b>Tuesday</b> <b>24/09/19</b> 17:00 - 20:00	5. Demography (1). 6. Demography (2). 7. Introduction to epidemiology.
<b>Monday</b> <b>30/09/19</b> 17:30 - 20:30	8. Measures of frequency, association and impact (1). 9. Measures of frequency, association and impact (2).
<b>Tuesday</b> <b>01/10/19</b> 17:00 - 20:00	10. Measures of frequency, association and impact (3). 11. Measures of frequency, association and impact (4).
<b>Monday</b> <b>14/10/19</b> 17:30 - 20:30	12. Types of epidemiological studies. 13. Descriptive epidemiological studies.
<b>Tuesday</b> <b>15/10/19</b> 17:00 - 20:00	14. Experimental studies. 15. Cohort studies. 16. Case-control studies.
<b>Monday</b> <b>21/10/19</b> 17:30 - 20:30	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).
<b>Tuesday</b> <b>22/10/19</b> 17:00 - 20:00	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.
<b>Monday</b> <b>28/10/19</b> 17:30 - 20:30	28. Health planning and programming (1). 29. Health planning and programming (2). 30. Health policies and health organization. Health systems. 31. Health system in Spain.
<b>Tuesday</b> <b>29/10/19</b> 17:00 - 20:00	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, non-communicable diseases (1).
<b>Monday</b> <b>04/11/19</b> 17:30 - 20:30	37. Epidemiology and prevention, non-communicable diseases (2). 38. Oral health programmes. 39. Epidemiology and prevention in oral health. 40. Oral health in Spain. Introduction to practice sessions

Practice sessions  
(Approximately two hours each)

Group 1 Date and time	Group 2 Date and time	Topic
<b>Monday</b> <b>11/11/19</b> 17:30 - 20:30	<b>Monday</b> <b>18/11/19</b> 17:30 - 20:30	Sources of health information and calculation of health indicators.

<b>Tuesday</b> <b>12/11/19</b> 17:00 - 20:00	<b>Tuesday</b> <b>19/11/19</b> 17:00 - 20:00	Demography. Epidemiology: measures of frequency, association and impact (1).
<b>Tuesday</b> <b>26/11/19</b> 17:00 - 20:30 <b>Tuesday</b> <b>10/12/19</b> 17:00 - 20:30	<b>Monday</b> <b>02/12/19</b> 17:30 - 20:30 <b>Tuesday</b> <b>03/12/19</b> 17:00 - 20:00	Epidemiology: measures of frequency, association and impact (2). Epidemiology: types of epidemiological studies. Epidemiology: valid statistical association and causality.
<b>Monday</b> <b>16/12/19</b> 17:30 - 20:30	<b>Tuesday</b> <b>17/12/19</b> 17:00 - 20:00	Epidemiology: epidemiological surveillance and study of outbreaks. Epidemiology: validity of diagnostic tests.
<b>Monday 13/01/20</b> 17:30 - 20:30		Review of the scientific literature (1). Review of the scientific literature (2).
<b>Tuesday 14/01/20</b> 17:00 - 20:00		Synthesis and review of main concepts.

Total duration of the course: from september 17, 2019 to january 14, 2020.

Exam date: according to the Centre's official calendar:

<https://fccsyd.unizar.es/academico/horarios-y-calendarios>

Location:

Facultad de Ciencias de la Salud y del Deporte (Huesca).

Sede de la Calle Velódromo - 22006 Huesca.

Classrooms: "aula 2" and "aula de informática".

Lectures and theory sessions in "aula 2".

Practice sessions 1 to 8 in "aula de informática" (two groups), 9, 10 and 11 in "aula 2".

The theoretical syllabus will be given in classroom 2.

Schedule:

Monday from 17:30 to 20:30 hours and Tuesday from 17 to 20 hours.

#### 4.5.Bibliography and recommended resources