



Study Plan

School: School of Nursing "São João de Deus"
Degree: *** TRANSLATE ME: Pós-Graduação ***
Course: Epidemiology (cód. 709)

Specialization Epidemiology

1st Year - 1st Semester Specialization Epidemiology

| Component code | Name | Scientific Area Field | ECTS | Duration | Hours |
|----------------|------------------------------------------------------|-----------------------|------|----------|-------|
| ENF13669O | Epidemiology and Public Health | Health Sciences | 6 | Semester | 156 |
| ENF13670O | Information and Surveillance System in Public Health | Health Sciences | 6 | Semester | 156 |
| ENF13671O | Contingency and Risk Management | Nursing | 6 | Semester | 156 |
| ENF13672O | Health Measurements: Questionnaires and Scales | Health Sciences | 6 | Semester | 156 |
| ENF13674O | Health Policies- Contributions to Management Change | Health Sciences | 6 | Semester | 156 |

1st Year - 2nd Semester Specialization Epidemiology

| Component code | Name | Scientific Area Field | ECTS | Duration | Hours |
|----------------|---------------------------------------------|------------------------------|------|----------|-------|
| ENF13675O | Epidemiological Approach Based on Life Path | Health Sciences | 6 | Semester | 156 |
| ENF13677O | Public Health Communication | Nursing | 6 | Semester | 156 |
| QUI13673O | Environmental Epidemiology | Biochemistry Health Sciences | 6 | Semester | 156 |
| MAT13608M | Categorical Data Analysis | Mathematics | 6 | Semester | 156 |
| FIL13678O | Ethics in Epidemiology and Public Health | Philosophy | 6 | Semester | 156 |

Specialization Epidemiology and Contingency Surveillance

1st Year - 1st Semester Specialization Epidemiology and Contingency Surveillance

| Component code | Name | Scientific Area Field | ECTS | Duration | Hours |
|----------------|------------------------------------------------------|-----------------------|------|----------|-------|
| ENF13669O | Epidemiology and Public Health | Health Sciences | 6 | Semester | 156 |
| ENF13670O | Information and Surveillance System in Public Health | Health Sciences | 6 | Semester | 156 |
| ENF13671O | Contingency and Risk Management | Nursing | 6 | Semester | 156 |
| ENF13672O | Health Measurements: Questionnaires and Scales | Health Sciences | 6 | Semester | 156 |
| ENF13674O | Health Policies- Contributions to Management Change | Health Sciences | 6 | Semester | 156 |



Specialization Applied epidemiology

1st Year - 2nd Semester

Specialization Applied epidemiology

| Component code | Name | Scientific Area Field | ECTS | Duration | Hours |
|----------------|---------------------------------------------|------------------------------|------|----------|-------|
| ENF13675O | Epidemiological Approach Based on Life Path | Health Sciences | 6 | Semester | 156 |
| ENF13677O | Public Health Communication | Nursing | 6 | Semester | 156 |
| QUI13673O | Environmental Epidemiology | Biochemistry Health Sciences | 6 | Semester | 156 |
| MAT13608M | Categorical Data Analysis | Mathematics | 6 | Semester | 156 |
| FIL13678O | Ethics in Epidemiology and Public Health | Philosophy | 6 | Semester | 156 |

Conditions for obtaining the Degree:

*** TRANSLATE ME:

Para a conclusão do curso de Pós-Graduação em Epidemiologia e obtenção do respetivo Diploma, o estudante tem de obter aproveitamento às uc's do 1º e 2º semestre

1º Ano - 1º semestre

6 Uc's obrigatorias - 30 ECTS

Os estudantes que se inscreverem apenas nas uc's do 1º Semestre e obtiverem aproveitamento a todas as UC's podem obter Certificado do Curso de Formação em Vigilância Epidemiologia e Contingência

1º Ano - 2º semestre

6 Uc's obrigatorias - 30 ECTS

Os estudantes que se inscreverem apenas nas uc's do 2º Semestre e obtiverem aproveitamento a todas as UC's podem obter Certificado do Curso de Formação em Epidemiologia Aplicada

Program Contents

[Back](#)

Epidemiology and Public Health (ENF13669O)

Evolution of epidemiological thinking

Descriptive epidemiology: People, place and time

Dynamics of disease transmission

Natural history of the disease

Measuring health and illness: measures of frequency, association and impact

Epidemiological studies

Epidemiological research planning



[Back](#)

Information and Surveillance System in Public Health (ENF136700)

Public health surveillance and alert systems

National Epidemiological Surveillance System (SINAVE)

Detection of outbreaks and events with potential impact on public health

Stages of investigation of outbreaks and events with potential impact on public health

Public health alerts in the national context - Detection and intervention

Public health alerts in the European and international context - Detection and intervention

Use of geographic information systems to investigate outbreaks

[Back](#)

Contingency and Risk Management (ENF136710)

- Levels of the preparation, response and recovery phases

- The elaboration of the Contingency Plan

- Reorganization of services taking into account the phases of a pandemic

- Use of Personal Protective Equipment

- The resumption of services

- Life in society and issues of self-care

- Legal issues (rights and duties) of professionals and citizens

[Back](#)

Health Measurements: Questionnaires and Scales (ENF136720)

●Fundamental measurement principles. Nominal, ordinal, interval and ratio measurement.

●Preparation of the questionnaire. Previous elements of presentation and consent. Face-to-face and electronic questionnaires.

●Scale and Index. The types of response. The format of the items. Dimensionality

●Quantitative instruments. Validation / adequacy. Reliability, validity (s). Statistics applied to the construction of questionnaires. Visit to IBM SPSS.

●Qualitative instruments. Visit to content analysis software.

[Back](#)

Health Policies- Contributions to Management Change (ENF136740)

1. Evolution of health policies in Portugal

a. Health policies in Portugal today

2. Health policies and organization of health systems

a. Health policies and health systems: Context and determinants of their evolution

b. Organizational typology of health systems

c. Analysis of the evolution of health systems

d. Financing, innovation, costs and impacts

3. Health and equity policies

a. The social determinants of health

b. Health strategies

4. Citizenship and participation in health

5. Future of the Health System and the National Health Service

a. Today's health challenges

b. New change management in the health system and the National Health Service

c. Wellbeing policies

d. Public policies and knowledge management



[Back](#)

Epidemiological Approach Based on Life Path (ENF136750)

1. Life course on health trajectories and transitions
 - a. Health development in the Life Course
 - b. Health and health transitions
2. Life Course Epidemiology
 - a. Theoretical Models in Life Course Epidemiology
3. Methodologies for studying health trajectories
4. Political implications of knowledge acquired in health trajectories and transitions

[Back](#)

Public Health Communication (ENF136770)

- Health communication, health education, and health literacy.
- Strategies to improve health communication.
- Communications for target/risk groups.
- Public health communication.

[Back](#)

Environmental Epidemiology (QUI136730)

UNIT 1. Environmental Health

- 1.1. Fundamentals of environmental health;
- 1.2. Definition of fundamental concepts;
- 1.3. Environmental law: characterization and general principles;
- 1.4. Environmental risk factors for human health and well-being;

UNIT 2. Environmental Epidemiology

- 2.1. Fundamentals of Environmental Epidemiology
- 2.2. General aspects of surveillance in environmental epidemiology;
- 2.3. Epidemiological variables in environmental epidemiology;

UNIT 3. Measurement in Environmental Epidemiology

- 3.1. Fundamentals of epidemiological measurement in the environment;
- 3.2. Inference - Sampling - Indicators - Causality;
- 3.3. Outbreak investigation and definition of mitigation strategies;

UNIT 4. Epidemiological Studies in Environmental Health

- 4.1. Research studies or design in epidemiology
- 4.2. Analytical studies
- 4.3. Experimental or environmental intervention studies
- 4.4. Contribution of epidemiological data to the decision-making process in Public Health.

[Back](#)

Categorical Data Analysis (MAT13608M)

- Contingency Tables and association and correlation measures with categorical variables.
- Generalized linear models: characterization, link functions, statistical modelling, assumptions, residual analysis, validation and inference.
- Discrete models: logit, probit, log-log, ordinal, Multinomial, Poisson, Negative Binomial, Inverse-Gaussian and Gama.
- Generalized additive models (GAM).
- Generalized Estimating Equations (GEE) and Generalized Linear Mixed Models (GLMM).
- Introduction to zero inflated models (ZIF).



[Back](#)

Ethics in Epidemiology and Public Health (FIL136780)

- I. Ethics and the Life and Health Sciences, today
- II. Ethical values, principles of action and human decision
- III. Ethical challenges in Epidemiology and Public Health
- IV. Epidemiology and Research
- V. Ethical regulation and “impossible choices” for politicians