

66852 - Qualitative tools applied to health

Syllabus Information

Academic year: 2023/24

Subject: 66852 - Qualitative tools applied to health

Faculty / School: 105 - Facultad de Veterinaria

Degree: 617 - Master's in Global Health: Integration of Environmental, Human and Animal Health

ECTS: 6.0

Year: 1

Semester: First semester

Subject type: Compulsory

Module:

1. General information

The objective of the subject is to train students in the use of tools that, together with those obtained in the complementary subject "Quantitative Epidemiology and Advanced Statistics", will help them to design study and research protocols, analyse and collect information, perform statistical and epidemiological analyses and present the results obtained.

These approaches and objectives enable the student to face are aligned with several of the Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>), so that the learning results of the subject provide training and competence to contribute to some extent to their achievement (SDGs 3,4,10, 12, 13 and 15).

2. Learning results

Upon completion of this subject, the student will be able to:

- Design and manage databases.
- Know the basics of quantitative and qualitative research applied to global health and wellness.
- Develop coding strategies and qualitative analysis.
- Conduct a social research report ("research brief")
- Manage computer tools for qualitative and graphic analysis.
- Learn the fundamental principles of the use of massive data and machine learning in applied health research.
- Design experimental studies.
- Know the ethical principles in the design of studies with human and animal populations.

3. Syllabus

BLOCK 1. Health information. Working with surveys (1 hour)

BLOCK 2. Introduction to the R programming language (20 hours)

BLOCK 3. Database design and management (14 hours)

BLOCK 4. Big Data and machine learning (5 hours)

BLOCK 5. Work protocols in animal experimentation (10 hours)

BLOCK 6. Social research in the field of health and wellness (10 hours)

4. Academic activities

Learning activities include lectures by teachers from the University of Zaragoza. In addition, students will have to solve problems and practical cases (in the classroom and computer room) and will perform a practical observation exercise in the campus of the University of Zaragoza. Finally, autonomous work by the student is required for the understanding of the theoretical and practical knowledge acquired.

1. Theoretical and practical classes. 60 sessions of 1 hour.
2. Individual study and solving the cases proposed in a non-attendance basis.

5. Assessment system

The student must demonstrate achievement of the intended learning results through the following continuous assessment activities, either individually or in groups:

1. Presentation of a database with at least three tables, two forms, and three queries (20 % of the grade).
2. Performance of a graphical analysis from a database, including at least 4 types of graphs. (30 % of the grade)

3. Design of a working protocol for animal experimentation. (20 % of the grade)
4. Development of a prediction model from a database. (10 % of the grade)
5. Delivery of a social research design work with a multi-method approach applied to a specific problem in the field of health and social welfare (20 % of the grade).

Overall test

Students who have not passed a minimum of 80% of the proposed activities must prove that they have acquired the practical skills corresponding to the teaching not received by means of a specific exam consisting of a written assessment of the theoretical and practical contents or the completion of a final paper.