

Academic Year/course: 2023/24

25431 - Research Methodology in Health Sciences. Information systems and new technologies

Syllabus Information

Academic year: 2023/24

Subject: 25431 - Research Methodology in Health Sciences. Information systems and new technologies

Faculty / School: 127 - Facultad de Ciencias de la Salud

275 - Escuela Universitaria de Enfermería de Huesca

375 - Escuela Universitaria de Enfermería de Teruel

Degree: 559 - Degree in Nursing

560 - Degree in Nursing

561 - Degree in Nursing

ECTS: 6.0

Year: 1

Semester: First semester

Subject type: Basic Education

Module:

1. General information

In recent decades, socioeconomic, cultural and environmental changes have had repercussions on the appearance of different models of illness, on the presentation of health inequalities and on how to deal with the health-disease process. In order to address them, care, prevention and action strategies are needed at the individual and community levels, based on scientific evidence.

The general objective of the subject is to enable students to search for the most accurate information for the study of nursing care and to apply the scientific method to the study of the healthy and sick population.

SDG 3: Health and Wellness.

SDG 5: Gender Equality.

SDG 10: Reduction of Inequalities

SDG 11: Sustainable Cities and Communities

2. Learning results

The student, in order to pass this subject, must demonstrate the following results...

1-Identify, analyse and discuss the contributions of the research methodology in the nursing profession learning to apply the principles of research and information and the contributions of evidence-based nursing.

2-Handle the basic concepts of health and disease and the relative importance of psychosocial and gender determinants in the process of illness of the population and assess the influence of WHO strategies in the achievement of the Millennium Health Goals.

3-Identify the contributions of Public Health in the improvement of the health of the population and the contribution of the different disciplines.

4-Identify, select and use the most relevant bibliographic documentation systems for the review of nursing care for the healthy and sick person and for the population.

5-Initiate the design of a research project in health sciences, applying the scientific method, with special emphasis on the formulation of research questions, objectives and hypotheses, as well as the selection and organization of the selected scientific information.

3. Syllabus

Module I. Health Research. Health and Public Health.

Human health and sustainable development. Historical evolution of Public Health. Public Health in Spain. The process of health and disease and its determinants. Social determinants of health, interculturality and health inequalities. The World Health Organization and Public Health proposals. Primary Care, Health Promotion, Healthy Cities and Safe Communities. Health situation in Spain and Aragón. Comparative analysis with other countries. The interdisciplinarity in Public Health. Public Health Nursing.

Module II. Research design in Health Sciences.

Research process. Scientific method. Research in health sciences. Sources of bibliographic documentation in Health Sciences. Internet and Public Health. New technologies in health research. Conceptual framework of the research. Definition of the research question. Definition of objectives and hypothesis statement. Study design of epidemiological studies. Observational and experimental epidemiological studies. Fundamentals of qualitative research.

Scientific writing. Preparation of a review article.

The subject also integrates the course on **Basic Digital Competence** course developed by the Biomedical Library of the University of Zaragoza.

4. Academic activities

- Master classes: 45 h.
- Theoretical and practical seminars. 15 h/student. These are developed through a theoretical introduction and subsequent work in smaller groups to encourage discussion, and to answer questions or solve problems. These activities are important to achieve the learning results involving bibliographic search in scientific databases, initiation of a research project and problem solving.
- Tutorials, for the supervision of the field work and clarification of doubts about the theoretical and practical contents of the subject.
- Presentation of the seminars. Those intended for presentation in plenary in the classroom in ppt format, by working groups of six people.

5. Assessment system

Tutorial evaluation. Literature review paper (up to 4 points)

- Description: The work of bibliographic review consists of the elaboration of a bibliographic search in scientific databases , through which they perform an update of the health problem relevant to Community Nursing and Public Health, with the following sections: (1) Introduction to the subject of the study: update on the subject or analysis of the health problem, its importance and magnitude in terms of morbidity, mortality or other indicators, and a justification for the study. (2) Formulation of research questions. (3) Formulation of objectives. (4) Formulation of hypotheses in the study of the health problem. (5) Bibliography: Citations will be included with numbers, in order of appearance in the text, and it will include only the one used in the preparation of the work. It will include at least the 10 references used in the introduction. Bibliographic citations will be made according to Vancouver standards.

- Levels of demand: the work must achieve a minimum grade in each of the sections of 40% of what has been established. If any of the sections are not met, it is considered that the required minimums have not been reached.

Individual test. Written multiple-choice test (up to 6 points)

- Description: The written exam is an objective test, which will consist of 40 multiple-choice questions, with five possible answers , only one answer will be valid and no negative points will be considered. The questions will be of a theoretical or theoretical-practical nature on the subject matter explained in class and/or required readings.

- Levels of demand: To pass the subject, the student must obtain at least 28 correct answers.

- Criteria: In this test the answers to the questions posed in the exam will be evaluated following the grading system of article 5 of Royal Decree 1125/2003, of September 5).

Weighting final grade.

- Weighting on the final grade: The grading system will be expressed by means of a numerical grade in accordance with the provisions of article 5 of Royal Decree 1125/2003 of September 5 (BOE September 18), which establishes the European credit system and the grading system for official university degrees valid throughout the national territory.

In order to pass the subject it is essential to obtain at least:

- Multiple-choice test: 28 correct answers (3 points).
- Group work: 2 points out of a possible 4.
- The overall grade obtained from the sum of the two parts must be 5.00 or higher.

Qualification system (according to article 5 of Royal Decree 1125/2003, of September 5)

- 0 - 4.9 Fail
- 5 - 6.9 Pass
- 7 - 8.9 Notable
- 9 - 9.5 Outstanding
- 9.6 - 10 Honours