



Faculty of Health, Science and Technology
Nursing Science

Syllabus

Scientific methods in nursing

Course Code:	OMG005
Course Title:	Scientific methods in nursing <i>Vetenskapliga metoder i omvårdnad</i>
Credits:	7.5
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has at least 60 credits in first-cycle course/s as entry requirements (G2F)

Major Field of Study:
OMA (Nursing Science)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2024-08-21, and is valid from the Spring semester 2025 at Karlstad University.

Prerequisites

Fundamentals of Nursing and the Nursing Profession, 30 ECTS credits, and registered for Basic Clinical Nursing, 30 ECTS credits, with at least 26 ECTS credits completed, including Drug Dosage Calculation I, or equivalent

Learning Outcomes

Upon completion of the course, students should be able to:

Knowledge and understanding

1. describe qualitative and quantitative methods in nursing research and the characteristics of each approach,
2. describe literature study as a method in nursing research and its characteristics, and
3. give an account of the concepts credibility, validity, and reliability.

Competence and skills

4. develop a research question (an aim) in nursing research, including a research project proposal (PM),
5. apply structured database searches and approach the results of the study in a reflective manner, and
6. produce academic writing in the form of a written research paper which describes relevant parts of the research process.

Content

Instruction is in the form of lectures, literature study, study assignments, seminar assignments, group work, and supervision.

The course comprises the following components:

- The basics of academic writing and referencing
- Report writing in accordance with IMRAD (Introduction, Method, Result and Discussion), which includes the first two parts
- Structured database searches (search strategies, presenting searches, presenting results)
- Formulation of a research topic relevant for the professional area of competence of the nurse
- The most common methods for collecting empirical data, such as interviews, focus groups, and questionnaires
- Different types of literature study in relation to evidence-based nursing
- How to design a research project proposal
- The most common methods of data analysis, for descriptive and comparative statistics as well as qualitative analysis
- Credibility and transferability in relation to qualitative research
- Validity and reliability in relation to quantitative research
- Review templates and relevance review for different types of empirical studies

Reading List

See separate document.

Examination

Assessment is both individual and group-related and based on a written exam, a take-home exam in the form of a research project proposal, and seminars.

The examiner may decide that a student who is very close to a passing grade can complete a supplementary assignment to receive a passing grade for a specific examination. Additional examination material must be submitted within six days of notification. The supplementary assignment only is then assessed in accordance with the assessment criteria, and if it is insufficient, a grade of fail (U) will be given.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades

One of the grades Distinction (VG), Pass (G) or Fail (U) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.