



Faculty of Health, Science and Technology  
Nursing Science

# Syllabus

## Scientific methods in nursing

<b>Course Code:</b>	OMG005
<b>Course Title:</b>	Scientific methods in nursing <i>Vetenskapliga metoder i omvårdnad</i>
<b>Credits:</b>	7.5
<b>Degree Level:</b>	Undergraduate level
<b>Progressive Specialisation:</b>	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 2023-03-13, and is valid from the Autumn semester 2023 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
3. give an account of the concepts credibility, validity, and reliability

Competence and skills

4. develop a research question (an aim) in nursing research that can be addressed in a literature study
5. apply structured database searches and approach the results of the study in a reflective manner
6. produce academic writing in the form of a written research paper which describes all 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 all parts of the research process
- Structured database searches (search strategies, presenting searches, presenting results)
- Formulation of a research topic with support from a structured research question in accordance with PICO, PEO, SPICE etc.
- 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 mandatory seminars and a take-home exam in the form of a research project proposal. Additional material may be submitted for the assessment of the project proposal if submitted within ten days of notification.

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.