

RSJE02, Radiography: Person-centered Care in Neurological Conditions, 20 credits

Radiografi: Personcentrerad vård vid neurologiska tillstånd, 20 högskolepoäng
First Cycle / Grundnivå

Details of approval

The syllabus was approved by The Nursing, Radiography, and Reproductive, Perinatal and Sexual Health Programmes Board on 2026-05-21 (U 2026/362). The syllabus comes into effect 2026-05-21 and is valid from the spring semester 2027.

General information

The course follows the guidelines in the Higher Education Ordinance (SFS 1993:100 with subsequent amendments).

Language of instruction: English

Main field of study *Specialisation*

Radiography G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements

Learning outcomes

Knowledge and understanding

Upon completion of the course, the student should be able to

- explain the technical principles of common CT and MRI examinations (1),
- justify the choice of examination protocols for CT and MRI examinations (2),
- explain various aspects of contrast agents for CT and MRI examinations (3),
- explain topographic neuroanatomy based on the localization and spatial relationships of structures (4),
- explain common pathological findings in CT and MRI examinations (5),
- account for basic concepts, principles, and perspectives in healthcare ethics (6),

- explain the different phases of the periradiographic process in connection with CT and MRI examinations (7),
- account for person-centered care based on evidence in connection with CT and MRI examinations (8).

Competence and skills

Upon completion of the course, the student should be able to

- apply person-centered care during CT and MRI examinations (9),
- apply the periradiographic process in CT and MRI examinations (10),
- perform image processing for common CT and MRI examinations (11),
- plan for, administer, and document the use of contrast media (12),
- apply infection control principles to prevent infection and the spread of infection (13),
- perform medical technical procedures in a manner that ensures patient safety (14),
- apply and advocate for MRI safety and radiation protection measures (15).

Judgement and approach

Upon completion of the course, the student should be able to

- reflect on similarities and differences in conventional diagnostic examinations from an international perspective (16),
- reflect on the importance of ethics in a radiographic context (17),
- reflect on ethical approaches and professional responsibility in ethical situations (18),
- reflect on equal treatment in person-centered care in connection with the periradiographic process from a sustainability perspective (19),
- reflect on professional development and identify opportunities for sustainable learning (20).

Course content

The course focuses on radiography and person-centered care in connection with radiographic examinations using CT and MRI for neurological conditions. The content covers technical principles and radiation protection, contrast agents, topographic neuroanatomy, and neurodiagnostics. During the course, students are introduced to evidence-based care based on the periradiographic process, person-centered care, and ethical concepts and principles.

Students implement clinical training in a radiology department. This provides students with the opportunity to apply theoretical knowledge to practical action in a patient-safe manner. In connection with clinical training, students will reflect on professional development and professional attitudes. Prior to clinical training, students must participate in an MRI safety lecture and skills training regarding the handling of peripheral venous catheters.

Course design

The course comprises 40 hours per week on a full-time basis, of which clinical practice accounts for an average of 32 hours with mandatory attendance.

Instruction is based on a pedagogical approach that involves students actively processing course material individually and in groups through various learning activities.

Learning activities include case-based seminars, which train the ability to justify and argue for decisions and solutions, as well as to apply knowledge. Other learning activities include lectures and skills training. During clinical practice, students apply all aspects of radiography under supervision.

The clinical placement, the MRI safety lecture, written reflections related to the clinical placement, and the seminar on conventional diagnostic examinations are mandatory. If a student does not participate in a mandatory component or does not achieve the course objectives for that component, the student must complete the component at a later date. Mandatory components may be replaced with other learning activities.

Clinical Placement (VFU)

Clinical practice consists of an average of 32 hours per week with mandatory attendance. Clinical practice may take place during the day, evening, or night on any of the seven days of the week. No form of leave is granted during clinical practice. Clinical practice includes organized supervision and skills training.

A significant portion of the course's learning activities takes place in healthcare settings. A prerequisite for a student to participate in such components is that the healthcare facilities see no formal obstacles to accepting the student. A healthcare facility may refuse to grant a student access to the facility if it is assessed that patient safety or trust in the healthcare system is at risk or if another similar obstacle exists. A refusal may, for example, be based on the student having been convicted of certain types of crimes or having exhibited behavior that threatens patient safety or trust in the healthcare system. This refusal means that the student cannot participate in the learning components offered within the organization.

Assessment

Theoretical components: All assessment is conducted individually based on established criteria. For each assessment/component, one regular assessment and two re-examinations are scheduled. Students who do not achieve a passing grade on any of these occasions have the opportunity to take an additional assessment. Students who fail on two assessment occasions may request a change of examiner. During re-examinations, group assessments may be replaced by individual assessments.

Assessment of the clinical placement is conducted individually based on the established learning outcomes of the course. The examiner may decide to fail a student during ongoing clinical training if the student demonstrates such deficiencies in knowledge, skills, or attitude that these pose a significant risk of injury to persons or damage to property. An individual plan must be established. Only once the deficiencies have been remedied may an internship be offered again.

A clinical placement that is terminated prematurely by a student without a valid reason (supported by a certificate) will be assessed by the examiner as a failure, which means that the clinical placement opportunity is forfeited.

2701 Clinical placement CT, 6 credits

Oral individual review of internship (course objectives 9, 10, 11, 12, 13, 14, 15)

Written individual assignment (course objective 20)

Mandatory learning activity:

Written reflections

2702 Clinical placement MRI, 6 credits (Clinical placement MRI)

Oral individual review of an internship (course objectives 9, 10, 11, 12, 13, 14, 15)

Written individual assignment (course objective 20)

Mandatory learning activity:

MRI safety

Written reflections

2703 Clinical placement in conventional diagnostic examinations, 1.5 credits

Oral individual review of internship (course objectives 13, 16)

Mandatory learning activity:

Conventional diagnostic examinations from an international perspective

Skills training

2704 Case Study: Neurological Conditions, 4.5 credits

Written individual assignment (course objectives 1, 2, 3, 4, 5, 7, 8)

Oral individual assignment (course objectives 1, 2, 3, 4, 5, 7, 8)

2705 Person-Centered Care and Ethics, 2 credits

Written individual assignment (course objectives 6, 17, 18, 19)

Oral individual assignment (course objectives 6, 17, 18, 19)

The examiner, in consultation with the support services for students with disabilities, may deviate from the standard examination format to offer a student with a permanent disability an examination format that is equivalent to that applied to students without disabilities.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Grades

Grading scale includes the grades: Fail, Pass

To receive a Pass grade for the course, a student must receive a Pass on all examination components and participate in all mandatory learning activities.

Entry requirements

To be admitted to the course, the student must:

- have completed at least 2 years of a diagnostic radiography program at a partner university within the Erasmus Radiography Group.