



**Karolinska  
Institutet**

Course syllabus for

## **Critical Care Nursing, 16.5 credits**

Vårdande vid akut ohälsa, 16.5 hp

This course syllabus is valid from spring 2021.

Please note that the course syllabus is available in the following versions:

[Autumn2019](#) , [Spring2020](#) , [Spring2021](#) , [Autumn2022](#) , [Spring2024](#) , [Autumn2024](#)

Course code	1SJ026
Course name	Critical Care Nursing
Credits	16.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Nursing
Level	G2 - First cycle 2
Grading scale	Pass, Fail
Department	Department of Neurobiology, Care Sciences and Society
Participating institutions	<ul style="list-style-type: none"><li>• Department of Laboratory Medicine</li><li>• Department of Clinical Science and Education, Södersjukhuset</li></ul>
Decided by	Utbildningsnämnden NVS
Decision date	2019-04-10
Revised by	Education committee NVS
Last revision	2020-10-06
Course syllabus valid from	Spring 2021

## **Specific entry requirements**

Admission to semester 5:

All courses from semesters 1-3

Semester 4: Passed assessment from placement 7.5 credits + 7.5 credits (1SJ023 and 1SJ024).

Students who have failed the clinical placement due to deficiencies in knowledge, skills or attitudes serious enough to jeopardise patient security or patients' trust in healthcare can qualify for a new clinical placement only when an individual action plan has been completed.

## **Objectives**

The general aim of the course is that: students acquire and can implement knowledge of human experiences of and reactions to acute illness, based on person-centered care, as well as be able to independently plan, carry out and evaluate the nursing needs of patients and families in acute care situations. - that students acquire clinical reasoning skills and readiness to handle acute care situations

and obtain an understanding of the vulnerability of patients and their families in these situations. Students will understand the importance of patient safety within the context of the technology and people involved in acute care. - that students are able to assure patients' right to healthcare on an equal footing, to ensure patient learning, to work as a part of a team, and to work according to ethical guidelines in the acute care context. - that students can implement pharmacological knowledge in acute care, understand healthcare organisation in the case of disasters, and understand the function of nurses in the event of disaster.

Learning outcomes

### **Part 1: Emergency nursing**

Knowledge and understanding

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

- describe and explain failure in vital functions of acutely ill patients as well as motivate prioritised nursing and pharmacological measures
- describe and explain statutes relevant to acute care, medical technology, patient safety, and ethical principles
- explain the nursing process as a basis for nursing care in acute care contexts

Values and perspectives

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

- reflect on health and suffering patients and families in emergency care

### **Part 2: Clinically integrated learning: Clinical skills**

Skills and abilities

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

- properly use medical technology in a way that is safe for patients, staff and the environment.

Values and perspectives

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

- analyse the interplay between technology and people as well as explain how technology can influence patients' vulnerability, health and person-centered nursing care.

### **Part 3: Clinically integrated learning: Clinical placement**

Skills and abilities

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

- plan, carry out and evaluate nursing care based on a person-centered attitude and in collaboration with patient and families
- identify and assess behaviours, signs and symptoms as well as prioritise and show readiness in nursing of patient with acute illness.
- communicate information, both orally and in writing, in a way that is clear, structured and correct and that ensures patient safety
- demonstrate the ability to use technological equipment in a way that ensures safety for patients, staff and the environment
- be able to calculate, correctly prepare, administer and evaluate the effects of medications and to follow relevant laws and statutes
- plan and lead patient care as well as work together with other nurses and with other professions
- work to prevent infection by applying hospital hygienic principles

Values and perspectives

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

- evaluate the quality of nursing care related to evidence-based knowledge and suggest improvements
- understand and apply ethical and humanitarian values
- work to assure the rights of all people to healthcare on an equal footing
- relate to patients, families and staff according to the ethics of the profession, including in connection with intimate partner violence and violence against children

#### **Module 4: Pharmacology and medication dosage**

Knowledge and understanding

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

- describe medications that are used in acute healthcare

Skills and abilities

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

- Calculate correct medication dosages for acute illnesses

#### **Part 5: Disaster medicine**

Knowledge and understanding

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

- explain the nurse's role as well as society's organisation and preparedness in the case of serious events.

Skills and abilities

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

- demonstrate the ability to triage and initiate treatment on patients in the case of a serious event

Values and perspectives

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

- identify and analyse their own role and readiness in the context of a hospital's disaster preparedness plan and activities

## **Content**

Knowledge of acute illness and the function of the nurse in emergency care Identification of symptoms and signs and prioritisation of nursing measures to treat life-threatening conditions in the acutely ill patient A clinical placement over a consecutive period in an emergency care setting, where the student practices independent clinical reasoning as well as planning, carrying out and evaluating nursing care measures, under supervision and based on person-centered care. Cooperation, teamwork, and an ethical approach to nursing care Familiarity with medical technology through training and carrying out common tests and treatments, as well as reflection and analysis regarding medical technology's effects on patient vulnerability in emergency care Pharmacology and medication dosage related to acute illness, and with respect to patient safety Disaster preparedness, organisation and the nurse's role

The course includes five components

### **Nursing in acute ill health, 3.0 hp**

Grading scale: GU

Component 1 includes theoretical knowledge:

- threatened failure in vital functions and organs circulation, respiration and cognition
- clinical reasoning, assessment and prioritization and structured communication in critical care
- evidence-based nursing in emergency care
- nursing process
- patients and families experiences of health and suffering in critical care
- concepts in nursing care and person-centered nursing
- Perioperative nursing

## **Clinical skills, 2.0 hp**

Grading scale: GU

Component 2 includes theoretical and practical knowledge about:

- basic hygiene and aseptic guidelines relevant to the use of medical technology
- safe nursing care and patient safety
- clinical skills (including enteral tube, aspirator and oxygen)
- evidence based guidelines in relation to clinical skills
- assessment instruments (including NEWS)
- structured communication (including SBAR)
- relevant statutes
- compatibility testing and blood transfusions
- nursing research about technology and nursing in critical care
- patients and families experiences of medical technology
- simulation

## **Clinical placement, 9.0 hp**

Grading scale: GU

Component 3 includes application of knowledge about:

- the nursing process
- nursing documentation
- assessment and prioritisation in the face of threatened failure of a patient's vital functions
- clinical reasoning and readiness
- assessment instruments (including NEWS)
- acute treatment and prioritisation (including A-E)
- oral communication concerning patient care (including SBAR)
- person-centered nursing and teamwork
- calculation, preparation, administration, handling and effects of drugs in emergency care
- blood transfusions
- medical technology including enteral tube, aspirator and oxygen
- ethics and equality in emergency care
- violence in close relationship
- communication and relating to patients during brief nursing care encounters
- patient education
- relevant laws, statutes and safety precautions
- patient safety
- basic guidelines for hygiene and asepsis

## **Pharmacology and pharmaceutical calculation, 1.5 hp**

Grading scale: GU

Component 4 includes theoretical and practical knowledge about:

- medications for acute illnesses
- preparation and administration of medications
- effectiveness over time and storage of drugs
- environment and sustainability
- laws and regulations including those of relevance to patient safety

## **Emergency Nursing and Disaster Medicine, 1.0 hp**

Grading scale: GU

Component 5 includes the following theoretical and practical aspects

- local, regional, national and international disaster medical preparedness
- aims of and definitions related to disaster medical preparedness
- healthcare management systems and cooperation at the regional and local level (disaster area and hospital )
- Decision-making and triage in the disaster area and referral to the correct level of care

## **Teaching methods**

Teaching is based on a problem-oriented and collaborative approach to learning in which the tasks provide opportunities for the student to take active responsibility for their learning. The working methods that are used are lectures, seminars, peer-learning, group assignments, literature studies, proficiency training, simulation and clinical placement.

Distance learning is based on IT and on independent and collaborative learning. The course relies on a variety of working methods including individual study assignments, group work, virtual discussions, seminars and lectures. Teacher support is provided via an IT-based learning management system.

the 6-week equivalent clinical placement is located in an emergency care setting and includes 40 hours/week of which 32 hours/week are located in activities with individual or group supervision and reflection. The clinical placement period can include days, evenings, nights and weekends, as well as bank holidays if necessary. Student are not allowed to shorten the length of the clinical placement.

The examiner may, with immediate effect, interrupt a student's clinical placement (or equivalent) if the student demonstrates such serious deficiencies in knowledge, skills or attitude that patient safety or patient confidence in healthcare is at risk. If a clinical placement is interrupted in this way the student is deemed to have failed that element and to have used up one clinical placement opportunity. In such cases, an individual action plan should be set up stating which activities and tests are required before the student is qualified for a new clinical placement on the course.

## **Examination**

Component 1 is assessed individually by a written examination.

Component 2 is assessed by clinical examination as well as by individual written take-home examination.

Component 3 is assessed by an assessment of the placement and seminar on ethical and humanistic foundations. During the placement, continuous assessment of the student's achievements are taken place. Half-time- and final assessment is carried out. Professional supervisor and/or co-opted clinical lecturer give bases of assessment according to established evaluation form for clinical placement. If a student is at risk for failure the responsible university teacher should establish a written action plan for the rest of the placement, in consultation with the placement supervisor and the student, no later than at the half-time assessment.

Component 4 is assessed by an individual written examination.

Component 5 is assessed by a self-test.

For all components a two-grade scale applies Pass/fail

To pass the course a student must demonstrate completion of all the course learning outcomes which entails a passing grade in course components 1-5 as well as active participation in compulsory course activities. Grades are assigned by the examiner.

Participation in seminars, group assignments, laboratory sessions, proficiency training and the clinical placement is compulsory. In case of absence from compulsory parts, compensation in consultation with examiner takes place.

Students who do not pass a regular examination are entitled to re-sit the examination on five more occasions.

If a student has not passed the course after taking the examination six times no further chances to take the exam will be given.

Each occasion the student participates in the same test counts as an examination. Submission of a blank exam paper is regarded as an examination. In case a student is registered for an examination but does not attend, this is not regarded as an examination.

If there are special grounds, or a need for adaptation for a student with a disability, the examiner may decide to deviate from the syllabus's regulations on the examination form, the number of examination opportunities, the possibility of supplementation or exemptions from the compulsory section/s of the course etc. Content and learning outcomes as well as the level of expected skills, knowledge and abilities may not be changed, removed or reduced.

The examiner may, with immediate effect, interrupt a student's clinical placement (or equivalent) if the student demonstrates such serious deficiencies in knowledge, skills or attitude that patient safety or patient confidence in healthcare is at risk. If a clinical placement is interrupted in this way the student is deemed to have failed that element and to have used up one clinical placement opportunity. In such cases, an individual action plan should be set up stating which activities and tests are required before the student is qualified for a new clinical placement on the course.

Students who fail a clinical placement (or equivalent) as a result of demonstrating such a serious lack of knowledge, skills or attitude that patient safety or the patients' confidence in medical care is at risk, will only be qualified for a new clinical placement once the individual action plan has been carried out.

The examiner assesses if, and how, absence from compulsory parts can be compensated. A final assessment cannot be given until the student successfully completes all of the compulsory course requirements (or has made arrangements with instructors to make up for absences during the course). Absence from a compulsory course element could mean that the student can not retake the element until the next time the course is offered.

## **Transitional provisions**

If the course has ceased, changed considerably in content, or substantially changed its reading list, the student may take three additional tests (excluding regular test) on the earlier contents or the previous literature for up to one year after the course changes have been made.

## **Other directives**

The course evaluation will be conducted according to the guidelines that are established by the Committee for Higher Education.

Some teaching may be in English.

The course will not be credited in a degree together with another course the student has completed and passed which completely or partly corresponds to the contents of this course.

# Literature and other teaching aids

*Boman, Lennart; Wikström, Claes*

## **Medicinsk teknik : teori, planering och genomförande**

Andra upplagan : Lund : Studentlitteratur, [2019] - 526 sidor

ISBN:9789144121888 LIBRIS-ID:x7mqvwqfvcjl83j0

[Library search](#)

## **Omvårdnadens grunder : Hälsa och ohälsa**

*Edberg, Anna-Karin; Wijk, Helle*

tredje upplagan : Lund : Studentlitteratur, 2019 - 756 sidor

ISBN:9789144123165 LIBRIS-ID:5gkprpnf39z8ztjx

[Library search](#)

*Ehnfors, Margareta; Ehrenberg, Anna; Thorell-Ekstrand, Ingrid*

## **Nya VIPS-boken : välbefinnande, integritet, prevention, säkerhet**

2. uppl. : Lund : Studentlitteratur, 2013 - 235 s.

ISBN:9789144089287 LIBRIS-ID:14706368

[Library search](#)

## **Omvårdnadens grunder : Ansvar och utveckling**

*Ehrenberg, Anna; Wallin, Lars; Edberg, Anna-Karin*

Tredje upplagan : Lund : Studentlitteratur, [2019] - 483 sidor

ISBN:9789144123172 LIBRIS-ID:dpsx0xwsbp338v4z

[Library search](#)

## **Omvårdnadens grunder : perspektiv och förhållningssätt**

*Friberg, Febe; Öhlén, Joakim*

Tredje upplagan : Lund : Studentlitteratur, [2019] - 711 sidor

ISBN:9789144123189 LIBRIS-ID:3dhmpmln1m0w1rb0

[Library search](#)

## **Omvårdnadsdiagnoser : definitioner och klassifikation 2018-2020**

*Herdman, T. Heather; Kamitsuru, Shigemi*

*Florin, Jan*

Fjärde upplagan : Lund : Studentlitteratur, [2019] - 514 sidor

ISBN:9789144125244 LIBRIS-ID:9l3pfxjd7x8774sx

[Library search](#)

## **Praktiska grunder för omvårdnad**

*Kristoffersen, Nina Jahren*

1. uppl. : Stockholm : Liber, 2016 - 590 s.

ISBN:978-91-47-11412-2 LIBRIS-ID:19451518

[Library search](#)

## **Medical-surgical nursing : assessment and management of clinical problems**

*Lewis, Sharon Mantik; Bucher, Linda; Heitkemper, Margaret M.; Harding, Mariann*

10th edition. : St. Louis, Missouri : Elsevier, Inc, [2017] - 2 volumes

ISBN:9780323328524 LIBRIS-ID:19795457

[Library search](#)

*Lena Nordgren och Sofia Almrud Österberg, Red.*

### **Akutvård ur ett patientperspektiv**

Studentlitteratur, 2012

*Sandman, Lars; Kjellström, Sofia*

### **Etikboken : etik för vårdande yrken**

Andra upplagan : Lund : Studentlitteratur, [2018] - 485 sidor

ISBN:9789144120539 LIBRIS-ID:9j6pz75q7d56bxcw

[Library search](#)

### **Psykosociala behov vid akut och kritisk sjukdom**

*Stubberud, Dag-Gunnar*

1. utg. : Stockholm : Natur & Kultur, 2015 - 308 s.

ISBN:9789127142398 LIBRIS-ID:17421168

[Library search](#)

*Toverud, Kari C.*

### **Klinisk omvårdnad : 1**

*Stubberud, Dag-Gunnar; Grønseth, Randi; Almås, Hallbjørg*

*Bolinder-Palmér, Inger; Olsson, Kristina*

Upplaga 3 : Stockholm : Liber, 2020 - 542 sidor

ISBN:9789147113590 LIBRIS-ID:r33xxlqbp8c7g5qr

[Library search](#)

*Toverud, Kari C*

### **Klinisk omvårdnad.**

*Almås, Hallbjørg; Stubberud, Dag-Gunnar; Grønseth, Randi*

*Bolinder-Palmér, Inger*

2., [uppdaterade] uppl. : Stockholm : Liber, 2011 - 572 s.

ISBN:978-91-47-09419-6 (inb.) LIBRIS-ID:12087275

[Library search](#)

*Wikström, Jonas*

### **Akutsjukvård : omvårdnad och behandling vid akut sjukdom eller skada**

Tredje upplagan : Lund : Studentlitteratur, [2018] - 327 sidor

ISBN:9789144115771 LIBRIS-ID:22515792

[Library search](#)

### **Vårdvetenskapliga begrepp i teori och praktik**

*Wiklund Gustin, Lena; Bergbom, Ingegerd*

Andra upplagan : Lund : Studentlitteratur AB, 2017 - 468 sidor

ISBN:978-91-44-11243-5 LIBRIS-ID:20900395

[Library search](#)

### **Säker vård : nya perspektiv på patientsäkerhet**

*Ödegård, Synnöve*

Första upplagan : Stockholm : Liber, [2019] - 313 sidor

ISBN:9789147113002 LIBRIS-ID:fqqrlhc0cp0kbtlb

[Library search](#)

### **Vårdhandboken**



Inera AB,

URL: [Länk](#)

*Björkman, Anna-Maria*

**Läkemedelsberäkning och läkemedelshantering**

3., [rev.] uppl. : Lund : Studentlitteratur, 2016 - 271 s.

ISBN:9789144109534 LIBRIS-ID:19523669

[Library search](#)

*Simonsen, Terje; Aarbakke, Jarle; Hasselström, Jan*

**Illustrerad farmakologi. : 1 Principer och tillämpningar**

4. [uppdaterade] utg., varav den tredje på svenska : Stockholm : Natur & Kultur, 2016 - 276 s.

ISBN:9789127142374 LIBRIS-ID:17414557

[Library search](#)

*Simonsen, Terje; Hasselström, Jan*

**Illustrerad farmakologi 2 Utg 4**

4. uppl. : Natur & Kultur Akademisk, 2016 - 500 s.

ISBN:9789127142381 LIBRIS-ID:17414359

[Library search](#)

**FASS**

senaste uppl. : Läkemedelsinformation AB,

URL: [www.fass.se](http://www.fass.se)

*Arman, Maria; Rehnsfeldt, Arne*

**DEF - det existentiella förbundet : existentiellt omhändertagande efter katastrof**

1. uppl. : Stockholm : Liber, 2012 - 146 s.

ISBN:978-91-47-10567-0 LIBRIS-ID:13519955

[Library search](#)

*Dyregrov, Atle*

**Katastrofpsykologi**

*Wentz, Karin Larsson*

2., [uppdaterade och utök.] uppl. : Lund : Studentlitteratur, 2002 - 380 s.

ISBN:91-44-02244-1 LIBRIS-ID:8741897

[Library search](#)

**Katastrofmedicin**

*Lennquist, Sten*

3., [omarb. och utvidgade] uppl. : Stockholm : Liber, 2009 - 448 s.

ISBN:978-91-47-08481-4 LIBRIS-ID:11289941

URL: [Omslagsbild](#)

[Library search](#)

**MIMMS - på svenska : major incident medical management and support : praktisk ledning av sjukvård vid en större skadehändelse**

*Mackway-Jones, Kevin*

2., [omarb. och utök.] uppl. : Lund : Studentlitteratur, 2014 - 189 s.

ISBN:9789144088174 LIBRIS-ID:16631927

[Library search](#)

*Rüter, Anders; Nilsson, Heléne; Vikström, Tore*

**Sjukvårdsledning vid olycka och katastrof : från skadeplats till vårdplats**

Lund : Studentlitteratur, 2006 - 102 s.

ISBN:91-44-03905-0z 91-44-03905-5 LIBRIS-ID:10083029

URL: <http://www.studentlitteratur.se/omslagsbild/artnr/32011-01/height/320/width/320/bild.jpg>

[Library search](#)

*Stockholms läns landsting (SLL)*

**Regional katastrofmedicinsk plan**

URL: [www-dokument](#)

**Skydd mot internationella hot mot människors hälsa.**

Stockholm : Regeringen, [2006] - 234 s.

LIBRIS-ID:11225230

URL: [Länk](#)