Course syllabus for

Standardisation within Health Informatics, 5 credits

Standardisering inom hälsoinformatik, 5 hp
This course syllabus is valid from spring 2021.
Please note that the course syllabus is available in the following versions:
Spring2018 , Spring2019 , Spring2021 , Autumn2021 , Spring2024

Course code	5HI020
Course name	Standardisation within Health Informatics
Credits	5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Health Informatics
Level	AV - Second cycle
Grading scale	Excellent, Very good, Good, Satisfactory, Sufficient, Fail, Fail
Department	Department of Learning, Informatics, Management and Ethics
Decided by	Utbildningsnämnden LIME
Decision date	2017-10-25
Revised by	Education committee LIME
Last revision	2020-08-19
Course syllabus valid from	Spring 2021

Specific entry requirements

A Bachelor's degree or a professional degree equivalent to a Swedish Bachelor's degree of at least 180 credits in healthcare, biomedicine, medical technology, computer and systems sciences, informatics or the equivalent. And proficiency in English equivalent to English B/English 6.

Objectives

The general aims of the course are to enable students to acquire knowledge and skills to choose, analyse and apply different health informatics standards to store, retrieve, represent and exchange data between different health information systems.

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

Knowledge and understanding

- account for the importance of health informatics standards and terminologies for management of patient information,

- account for different ways to use controlled terminology for care documentation,
- account for different ways to use health informatics standards to achieve interoperability between health information systems, and
- explain methods to represent medical knowledge in form of standardised models.

Skills and ability

- analyse and apply different standards to represent and exchange information between different health information systems,
- chose and apply techniques to model clinical knowledge, and
- evaluate possible fields for standardisation and possible choices of standards.

Assessment ability and attitudes

- assess the possible impact of health informatics standardisation on the efficiency, effectiveness and quality of care, and
- reflect on the use of health informatics standards in different countries.

Content

- National and international standardisation organisations and initiatives
- Different levels of interoperability
- Overview over health informatics standards, coding systems, terminologies and ontologies, e.g. HL7 series of standards, OpenEHR, SNOMED CT, Continua
- Models for clinical knowledge representation

Teaching methods

Lectures, seminars and computer laboratory sessions.

Examination

Examination is based on group assignments as well as on an individual digital written examination at distance. Group assignments will be graded pass/fail and the individual digital written examination at distance will be graded with A-F. Final grading is done when all mandatory parts of the examination are performed.

Compulsory participation

The course includes mandatory sessions marked in the course schedule. The examiner assesses if and, in that case, how absence from participation in the group activity and compulsory parts can be compensated. Before the student has participated in all compulsory parts or compensated absence in accordance with the examiner's instructions, the student's results for the course will not be registered. Absence from a compulsory part may result in the student having to wait to compensate until the next time the course is given.

Limitation of number of occasions to write the exam

Students who have not passed the regular examination are entitled to participate in five more examinations. If the student has not passed the exam after four participations he/she is encouraged to visit the study counsellor. If the student has failed six examinations/tests, no additional examination or new admission is provided. The number of times that the student has participated in one and the same examination is regarded as an examination session. Submission of a blank examination is regarded as an examination. Delayed submission affects the possibility to receive a higher grade than C. An examination for which the student registered but not participated in will not be counted 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.

Transitional provisions

Examination will be provided during a time of two years after a possible cancellation of the course. Examination can take place according to an earlier literature list during a time of one year after the date when a major renewal of the literature list has been made.

Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Committee for Higher Education. The course is given in English.

Literature and other teaching aids

Benson, Tim.; Grieve, Grahame.

Principles of Health Interoperability : SNOMED CT, HL7 and FHIR

3rd ed. 2016. : Cham : Springer International Publishing, 2016 - XXIX, 451 p. 89 illus., 24 illus. in color.

ISBN:9783319303703 LIBRIS-ID:19580017

URL: Table of Contents / Abstracts

Library search

Clinical Decision Support : The Road to Broad Adoption

Academic Press, 2014

LIBRIS-ID:16549930

Part IV: The Technology of Clinical Decision Support