Digital Didactics – ICT in education

Digital Didaktik – IT i utbildningen

**Credit points:** 7,5

**Responsible department:** Department of Applied Educational Science

**Main field of study:** Educational Work - The course is optional. It may also be part of other graduate programs related to the educational science field.

**Level:** Post graduate studies

**Specialisation in relation to degree requirements:** Licentiate of Philosophy or Doctor of Philosophy (Ph.D.)

**Subject area:** Educational Sciences; Social Sciences

**Required knowledge:** Applicants are required to be registered at a PhD program.

**Grading scale:** Pass; Fail. International students will be given grades due to the European Credit Transfer System (ECTS)

**Confirmation**

This course syllabus has been confirmed by the head of the Department of Applied Educational Sciences at Umeå University on 2014-04-29 and the course syllabus is valid from 2014-04-29.

**Aim**

The aim of the course is to give an overview about ICT in education regarding different concepts, models and theories about digital media and learning. A further aim is to develop students’ competencies for understanding, studying, evaluating, designing and scrutinizing ICT in different educational situations. In addition to the knowledge about underlying theories, the aim is to discuss and reflect hidden social and pedagogical processes, sociotechnical systems and different kinds of technologies for different learning purposes. ICT integration in education is not only “didactics + ICT” but rather an interwoven process emanating from new key principles for learning.

**Content**

The first module starts with making different problems of ICT integration in education visible and questioning the “hype” of new technology like nowadays iPads and MOOCs (massive open online courses). The module introduces well-known problems of pedagogy focusing on how to design teaching and learning. Three different layers will be discussed, namely a) didactical models and theories, b) digital didactical designs, and c) didactical conditions affecting each other. The theory of *digital didactical design* will be introduced in relation to the quality of teaching and learning.

The second module goes deeper into the theory of sociotechnical systems. The differences of technical and social systems will be discussed. Similarities and differences of the terms such as system, networks and (online-) communities will be illustrated and reflected on.
The third module deals with concepts and terms of Educational Technology, Computer-Supported-Collaborative Learning (CSCL), Technology-Enhanced Learning (TEL) and Social Media/Web 2.0. Characterizations and criteria on how to assess different forms of technology and the richness of different functions for teaching and learning will be addressed. Methods for studying ICT in education such as Design-based approaches will be presented and outlined.

**Expected learning outcomes**
After completing the course, the student should

**Knowledge and understanding**
- have gained general knowledge and developed an understanding about ICT in education as sociotechnical system and have developed her/his understanding of the similarities and the differences of social and technical systems.

**Skills and abilities**
- be able to scrutinize the complex phenomenon of ICT-integration in education and existing problems and be able to formulate new problems with regard to of ICT and digital didactics.

**Competencies of critical evaluation and set of attitudes**
- be able to analyse and evaluate structures and elements of digital didactical designs and should be able to apply the theories of Digital Didactics to her/his PhD topic.

**Form of instruction**
Teaching is conducted through lectures, seminars, workshops, role play, literature studies and practical work independently presented both orally and in writing. Teaching and instruction will be in English.

**Examination modes**
In order to be awarded a Pass grade for the course, the students should (a) present an essay (4 pages) about problems in the field of ICT in education, (b) give peer-reflective feedback to at least one other student paper, (c) do a presentation, and (d) attend lectures, seminars and workshops.

**ECTS / Academic credit transfer**
Academic credit transfers are reviewed individually. For more information, please see the University’s set of rules and academic credit transfer regulations.
**Course syllabus**

**Course literature**


