Web Programming and Databases

Webbprogrammering och databaser

6 credits

Programme course

729G28

Valid from: 2022 Autumn semester

Determined by	Main field of study	
The Quality Board at the Faculty of Arts and Sciences	Cognitive Science	
Date determined	**Course level**	**Progressive specialisation**
2009-06-12	First cycle	G2F
Revised by	**Disciplinary domain**	
Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Technology	
Revision date	**Subject group**	
2016-08-25; 2022-04-29	Informatics/Computer and Systems Sciences	
Offered first time	**Offered for the last time**	
Autumn semester 2009		
Department	**Replaced by**	
Institutionen för datavetenskap		

Course offered for

- Bachelor´s Programme in Cognitive Science

Entry requirements

General entry requirements for undergraduate studies
and
Social Studies, English and Mathematics corresponding to the level in Swedish
upper secondary education (Samhällskunskap 1b or 1a1 and 1a2, Engelska 6,
Matematik 3b/3c or Matematik C)
and
At least 90 ECTS credits passed from the Cognitive Science bachelor's program
semester 1 to 4, including the courses Cognitive Science Introductory Course 9
ECTS credits, Information Technology and Programming 12 ECTS credits, and
Research Methodology and Statistics 9 ECTS credits, or equivalent.

Intended learning outcomes

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

- account for how databases function and how they can be used
- structure and work with large amounts of data by means of database design
- account for central concepts in the database field
- design a data model by means of ER modelling
- design and use a relational database using SQL
- account for what is good design of a database
- create dynamic web sides that use a relational database

Course content

The contents of the course are focused on:

- principles of and use of common database management systems
- methods for database design and database use, for example Normalisation
- data modelling techniques: The ER model, the relational model
- data manipulation with SQL
- PHP programming

Teaching and working methods

The teaching will be based on practical exercises, where different concepts and
techniques are illustrated. In the course, a project is also included.

Examination

The course is examined through:

- Individual written exam, grading scale: UV
- Oral and written assignments in groups, grading scale: UG

The final grade is based on the individual written exam, assuming all assignments have a passing grade.

If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.

If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaining the objectives of the course.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

Grades

Three-grade scale, U, G, VG

Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

If special circumstances prevail, the vice-chancellor may in a special decision specify the preconditions for temporary deviations from this course syllabus, and delegate the right to take such decisions.

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