



Faculty of Arts and Social Science
Information Systems

Syllabus

Elementary database design

Course Code:	ISGA21
Course Title:	Elementary database design <i>Grundläggande databasdesign</i>
Credits:	7.5
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has only upper-secondary level entry requirements (G1N)

Major Field of Study:
IKA (Information Systems)

Course Approval

The syllabus was approved by the Faculty of Arts and Social Science 2015-12-01, and is valid from the Spring semester 2016 at Karlstad University.

Prerequisites

General admission requirements

Learning Outcomes

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

- describe the distinguishing features and components of relational databases,
- perform conceptual design of relational databases,
- carry out logic design and normalisation of relational database design,
- apply SQL to update and query to the database, and describe and explain the reasons for transaction situations such as concurrency and recovery and other critical problems in transaction management.

Content

The course centres on the design of relational databases from requirements specification to physical design. Elements such as conceptual, logic and physical design are treated, as are the basic concepts relating to database systems, database management systems, the relational model and integrity. Also the concept transaction management is discussed. Applications in the form of practical exercises in modelling databases and searching from databases using the language SQL are provided.

Reading List

See separate document.

Examination

Assessment is based on an exam, group presentations on hand in assignments and a written lab group report.

Grades

One of the grades Distinction (VG), Pass (g), or Fail (U) is awarded in the examination.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.

The course cannot be included in the same degree programme as the course ISGB01 Database Design, 7.5 ECTS cr.