



Faculty of Arts and Social Sciences  
Information Systems

## Syllabus

### Systems Implementation Techniques

<b>Course Code:</b>	ISGB11
<b>Course Title:</b>	Systems Implementation Techniques <i>Systemimplementeringsteknik</i>
<b>Credits:</b>	5
<b>Degree Level:</b>	Undergraduate level
<b>Progressive Specialisation:</b>	First cycle, has less than 60 credits in first-cycle course/s as entry requirements (G1F)

**Major Field of Study:**  
IKA (Information Systems)

#### Course Approval

The syllabus was approved by the Faculty of Arts and Social Sciences 2017-06-07, and is valid from the Spring semester 2018 at Karlstad University.

#### Prerequisites

Web and Multimedia programme enrollment (SGWOM), and attended courses ISGA04 Introductory Programming, 7.5 ECTS cr, ISGA11 HTML and CSS for web development 5 ECTS cr, and ISGB18 Introduction to object-oriented programming, or equivalent.

#### Learning Outcomes

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

- give an account of the difference between desktop applications and web-based applications,
- produce web-based applications that solve the difference between desktop applications and web-based applications,
- give an account of frameworks and content-management systems in relation to web-based applications,
- produce web-based applications based on frameworks as well as content-management systems, and
- reflect on and evaluate appropriate approaches to producing web-based applications.

#### Content

Students create web-based applications adopting three complementary implementation approaches. More specifically, students use a server-based script language to solve the difference between desktop applications and web-based applications based on stateless environments with connectionless computer communication. Students also create web-based applications with frameworks as well as content-management systems. The appropriateness of using the different implementation approaches to create web-based applications is also treated.

**Reading List**

See separate document.

**Examination**

Assessment is based on hand-in group assignments and a written exam.

**Grades**

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

**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.