

### School of Economics and Management

# SYSA12, Informatics: Information Systems and Business, 30 credits

Informatik: Informationssystem och verksamhet, 30 högskolepoäng First Cycle / Grundnivå

# Details of approval

The syllabus is an old version, approved by The Board of the Department of Informatics on 2013-09-20 and was last revised on 2017-10-11. The revised syllabus applied from 2018-01-15., spring semester 2018.

### General Information

The course makes up the second semester of the BSc programme in Design of Information Systems.

Language of instruction: Swedish Required reading in English may be included.

Main field of studies Depth of study relative to the degree

requirements

Information Systems G1F, First cycle, has less than 60 credits in

first-cycle course/s as entry requirements

# Learning outcomes

On completion of the course, the student shall have obtained knowledge of relevance for work with practical development of information technology (IT) and information systems (IS) within the fields of group dynamics and communication, organisation, business and IT/IS, project management, interaction design, IT law and IS projects.

### Knowledge and understanding

For a pass on the course, students shall demonstrate knowledge and understanding of

- basic theories, models and concepts within group psychology,
- conversation and interview methodology,
- basic theories, models and concepts of IT and IS in organisations,

- the impact of the design and use of IS on organisations, activities and individuals,
- the impact of the needs and requirements of organisations on the use, design and introduction of IT and IS,
- the knowledge development, problems and prerequisites of project management,
- their different roles, areas of responsibility and cooperation in a development process,
- the life cycle and different phases of a project,
- the context and stakeholders of a project,
- choices of interaction-oriented methods,
- interaction design and development of sustainable IS solutions,
- legal rules that are relevant to development and use of information technology.

# Competence and skills

For a pass on the course, students shall demonstrate competence and skills individually or in groups to

- use simple methods to structure, support and evaluate the cooperation in a study or working group,
- use methods and models to analyse problems and prerequisites for the development of IS solutions,
- explain how an IS design contributes to the improvement of an organisation and its activities.
- identify the need of different roles and areas of responsibility in a project,
- plan, carry out and report an IS project,
- seek, collect and assess different types of information that concern a project and its management,
- work with interaction design and methods for increased user focus,
- identify target groups for the development of IT/IS solutions,
- identify, analyse and solve legal issues related to information technology.

### Judgement and approach

For a pass on the course, students shall demonstrate the ability to

- reflectingly connect theoretical concepts to their own experience of group work,
- assess the mutual impact of organisations and their activities and IS,
- assess projects and the scope for action of the project management,
- assess the role of the designer in interaction-related processes,
- choose, assess and explain the choice of representatives for target groups and other stakeholders.
- assess the advantages and shortcomings of methods within interaction design,
- assess different legal methods employed by society in relation to information technology,
- independently document, reflect on and evaluate their own learning process and goal attainment.

### Course content

The course deals with

- psychological theories and models for understanding communication and group processes in overview,
- different roles, areas of responsibility and authorities within an organisation,
- the internal processes of organisations with regard to efficiency improvement and IT support,

- the structure and context of organisations and the interaction with IT and IS,
- the roles of different IT systems in an organisation,
- the function and interaction of organisations with other organisations and wider society,
- the frames, complexity and prerequisites for projects and project management,
- project brief, project definition and establishment,
- project management, implementation and evaluation,
- project ethics,
- methods and assessment criteria for interaction-oriented development,
- interface design,
- choice of interaction-oriented methods for the development of IS solutions,
- human limitations of relevance to interface design,
- contract and sales law from an electronic commerce perspective,
- electronic contracts, electronic payment, rules about distance contracts and electronic signatures,
- intellectual property rights, particularly copyright and patent law in a digital environment.
- personal data protection, electronic communication, responsibility for online bulletin boards,
- online marketing, issues of international private and procedural law and certain criminal law issues,
- simplified methods for problem identification in view of prioritisation, choice and development of mission critical solutions,
- a project based on the different subareas of the course addressing the development and change of an IS.

#### Modules

Group dynamics and communication, Organisation, business and IS, Project management, Interaction design, IT law.

# Course design

The teaching consists of lectures, lessons, seminars, workshops, laboratory exercises, conversation and interview exercises, group exercises and supervision.

The course includes compulsory components, which are stated in the schedule.

### Assessment

The assessment is based on written exams, assignments and reports.

Assessed components including documentation and written reflections are compiled in the student's learning portfolio.

Re-examinations are offered in close conjunction with the first examination.

Cheating such as plagiarism, fabrication and falsification is considered a serious offence in higher education (see Chapter 10 of the Higher Education Ordinance). The disciplinary measures that may be taken as a result of such offences are caution or

suspension for a limited period of time from the University.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Subcourses that are part of this course can be found in an appendix at the end of this document.

### Grades

Marking scale: Fail, E, D, C, B, A.

## **Grade** (Definition) Points or percentage out of maximum points. Characteristic.

**A** (Excellent) 85-100. A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**B** (Very good) 75-84. A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**C** (Good) 65-74. The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought and lives up to expectations.

**D** (Satisfactory) 55-64. The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**E** (Sufficient) 50-54. The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

**F** (Fail) 0-49. The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought.

To pass the course, the students must have been awarded the grade of E or higher.

#### **Grading rules and definitions**

Grades are awarded according to a graded scale from A (highest) to F (lowest), with E as the minimum passing grade.

When the exam/assignment is not graded, the grades G (Pass) or F (Fail) will be applied.

Course grades

When calculating course grades, the graded components will be weighted according to the following formula:

The number of credits for the exam is multiplied with the exam score. The total value is then divided by the total number of credits for the exams/assignments included. The resulting average is then rounded off to the nearest whole number. The number indicates the relevant course grade in accordance with the grading definitions above.

For exams/assignments which are graded and scored, the grades A to F will be used in accordance with the grading definitions above. The exam score will be used directly in the calculation.

For exams/assignments which are graded but not scored, the grades A to F will be used and converted as follows: A = 92, B = 80, C = 70, D = 60, E = 52.

Exams/assignments which are not graded but awarded with G (Pass) or F (Fail) will not be included in the calculation of the course grade.

# Entry requirements

To be admitted to the course, the student must have passed the general requirements and the course "Informatics: Introduction to Information Systems, 1-30 credits" or the equivalent.

### Further information

SYSA12 is a programme-specific course and only students on the BSc in Design of Information Systems are admitted.

SYSA12 may not be included in a degree together with SYSA02 or the equivalent.

It is compulsory to attend the introduction meeting, where a roll call will be taken. Absence without notification means that the admitted student will lose his/her seat on the course.

For transitional provisions with regard to previous courses, please contact the study adviser for an individual assessment.

If the course is discontinued, there may be limited opportunities for re-examination. Please contact the study adviser for information.

#### **Amendments**

2012-01-20: The assessment of Project Management is changed from individual assignments to group assignments

2013-11-08: Updated reading list for the module IT law.

2016-04-01: Updated reading list for the module Project Management and Organisation, Business and IS. Clarification of the entry requirements. Added information that attendance is required at the course introduction meeting.

2016-06-03: New grading rules from Autumn term 2016.

2016-10-28: One learning outcome is changed and new literature on the module IT law from Spring term 2017.

2017-10-11: Updated reading list for the modules IT Law and Group dynamics and communication from Spring term 2018.

### Subcourses in SYSA12, Informatics: Information Systems and Business

### Applies from V12

- 1101 Group Dynamics and Communication, Written Exam, 3,0 hp Grading scale: Fail, E, D, C, B, A Individual exam.
- 1102 Organisation, Business and IS, Written Assignment, 3,0 hp Grading scale: Fail, E, D, C, B, A Group assignment.
- 1103 Organisation, Business and IS, Written Exam, 4,0 hp Grading scale: Fail, E, D, C, B, A Individual assignment.
- 1104 Project Management, Written Exam, 4,0 hp Grading scale: Fail, E, D, C, B, A Individual exam.
- 1105 Project Management, Written Group Assignments, 3,0 hp Grading scale: Fail, Pass
- 1106 Interaction Design, Written Exam, 3,0 hp Grading scale: Fail, E, D, C, B, A Individual exam.
- 1107 Interaction Design, Written Assignment, 3,0 hp Grading scale: Fail, E, D, C, B, A Group assignment.
- 1108 IT Legislation, Written Exam, 4,0 hp Grading scale: Fail, E, D, C, B, A Individual exam.
- 1109 IS Project, Written Assignment, 2,0 hp Grading scale: Fail, E, D, C, B, A Group assignment.
- 1110 Learning Portfolio, Written Assignment, 1,0 hp Grading scale: Fail, Pass