

Information Systems Development,

37C00250 (6cr)

SYLLABUS 2024

Version (19 December 2023) – Minor updates (6 January 2024).

Instructor's contact information	Course information
Riitta Hekkala; riitta.hekkala@aalto.fi	Status of the course: Academic Year 2024
Meeting Hours via Teams/ Zoom/ Office: by appointment	Lecture halls: U6 KONECRANES - U149
Instructor's Webpage: http://people.aalto.fi/riitta_hekkala	Language of Instruction: English
	Course Website: https://mycourses.aalto.fi/course/view.php?id=40786
	Teaching Assistants: –

1. OVERVIEW

This course introduces the information system (IS) development process to students. During the course the students will learn about the main development frameworks (waterfall, agile), defining of system requirements, and modeling of data, architecture, and components' interactions within an information system. The course has some guest speakers who will provide in-depth information about specific aspects of IS design. There will be five learning journals/ diaries during this course, an exam and a personal video presentation (4-7 minutes).

2. PREREQUISITES

None

3. LEARNING OUTCOMES

After the course, the students will have acquired knowledge on general issues of information system development (ISD) from many perspectives (leadership, different processes of ISD (waterfall/ agile), and different human perspectives on ISD (e.g., a leader perspective, a software developer perspective etc.) After the course, the students can describe different methods, techniques, tools of ISD, and the main tasks of an information systems development process. They can evaluate the pros and cons of different IS development process models. They can use the basic system development modeling techniques that are common in multi-disciplinary software projects. These contents will be concretized during different lectures.

4. WORKLOAD, ASSESSMENT AND GRADING/ More detailed information will be provided later

1. Lectures: 18 hours face to face and 6 hours self-studying

2. 5 personal learning journals/diaries
3. An exam
4. A personal video presentation (4-7minutes)

Assessment: Grading scale 1-5:

- a. 30% personal learning journals from the selected lectures (5),
- b. 50% an exam,
- c. 20% a personal video presentation (4-7min)

5. READINGS

Avison, D. and Fitzgerald, G.: Information systems development. Methodologies, techniques & tools. 2006 (4th ed)

Hoffer, J.A., George, J.F. and Valacich, J.S., Modern Systems Analysis and Design, 4. edition, 2005; 5. edition 2008; 6. 2011; Pearson Prentice-Hall.

Note: the chapter numbers in the table (see below) may be different depending on the textbooks' editions.

The teacher will also provide some articles and online material in connection with the lectures. These contents will also be helpful in the group work and the personal video presentation.

6. PRELIMINARY SCHEDULE

Lectures:

- 09.01 - 13.02 Tue 13:15-14:45
- 11.01 - 15.02 Thu 13:15-14:45

Note: This is a draft and subject to minor change. MyCourses always has the most up-to-date version.

Session	Date	Topic	Readings	Assignment Due Date
Lecture 1	Tue 9 Jan 2024	Self-study: Readings an article - preparing for the key themes of the course.	Wyrzykowska, B. (2019) Baghizadeh, Z., Cecez-Kecmanovic, D., & Schlagwein, D. (2020)	A learning journal due 14 Jan
Lecture 2	Thu 11 Jan 2024	Introduction lecture & Organization of the course		
Lecture 3	Tue 16 Jan 2024	Future of Information Systems Development (ISD); different leadership philosophies	cf. Wyrzykowska, B. et al. (2019)	A learning journal due 21 Jan
Lecture 4	Thu 18 Jan 2024	ISD processes (Waterfall, and agile software development)	e.g., Hoffer et al. ch. 1 & Avison et al. ch. 3	A learning journal due 21 Jan
Lecture 5	Tue 23 Jan 2024	Working as a software developer in ISD projects	e.g., Hoffer et al. ch. 6 and p. 225–9	A learning journal due 28 Jan

Lecture 6	Thu 25 Jan 2024	Determining system requirements/ Use Cases (+ Object oriented analysis)	e.g., Hoffer et al. ch. 6 and p. 225–9	A learning journal due 28 Jan
Lecture 7	Tue 30 Jan	Enterprise architecture in information systems design	TBA	A learning journal due 4 Feb
Lecture 8	Thu 1 Feb 2024	Entity Relationship Model	e.g., Hoffer et al. ch. 9	A learning journal due 4 Feb
Lecture 9	Tue 6 Feb 2024	Human Perspectives for ISD // Virtual teams & leadership	TBA	A learning journal due 11 Feb Jan
Lecture 10	Thu 8 Feb 2024	Relational Model + Normalization	e.g., Hoffer et al. ch. 10	A learning journal due 11Feb
Lecture 11	Tue 13 Feb 2024	Self-Study: A personal video presentation		Due 25 Feb
Lecture 12	Thu 15 Feb 2024	Self-Study: A personal video presentation		
Exam1: 22.2.2024; 9-12 and Exam 2: 5.4.2024; 14-17.				

7. COURSE WORKLOAD

Lectures	18h
5 personal learning journals/diaries	15h
An exam	100h
A personal video presentation (4-7 minutes)	27h
Total	160h (6 op)

8. ETHICAL RULES/ Code of Conducts

Aalto University Code of Academic Integrity and Handling Thereof:
<https://www.aalto.fi/en/aalto-university/code-of-conduct>

9. OTHER ISSUES

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