MANAGEMENT INFORMATION SYSTEMS (MIS) (37C00100, 6 ECTS)

SYLLABUS

Version 0.6 (23.02.2022)

Instructor's contact information

Johanna Bragge, PhD, Senior University Lecturer johanna.bragge@aalto.fi

Aalto BIZ, Ekonominaukio 1

Office Hours via Zoom (to be agreed via email)

https://people.aalto.fi/johanna bragge

Teaching Assistant: Ly Nguyen

(ly.h.nguyen@aalto.fi)

Address general course inquiries to Bragge

Course information

BSc level core course in Information and Service Management (ISM) programme 2022. Period IV

Lectures in Hall U8 (NO compulsory attendance required, lectures will be recorded if possible)

Language of Instruction: English

https://mycourses.aalto.fi/course/info.php?id=31134

1.

2. OVERVIEW

Information technology and data have changed how businesses operate and succeed in today's global economy. Organizations can now use IT and data to transform themselves and achieve a tremendous competitive advantage. On the other hand, those organizations that are not mastering these assets might not exist in the near future. This course highlights how new technologies and data are changing the current business environment and what effect it has on today's students. The course addresses the major principles of Management Information Systems (MIS) in order to prepare managers to understand the strategic role of information technology and data in the digital economy. This course aims to give students what they need to succeed in the current digital economy. Contents of the course:

- 1. Information Systems and the Role of General and Functional Managers
- 2: Information Systems Defined
- 3: Organizational Information Systems and Their Impact
- 4: Digital Disruption and the Competitive Environment
- 5: Digital Transformation, Innovation, and Entrepreneurship
- 6: Strategic Information Systems Planning
- 7: Value Creation and Strategic Information Systems
- 8: Digital Value Creation
- 9: Digital Value Capture
- 10: Managing Information Systems
- 11: Creating Information Systems in the Digital Age
- 12: Information Systems Trends
- 13: Cybersecurity, Privacy, and Ethics

3. PREREQUISITES

No prerequisites.



4. LEARNING OUTCOMES

The course addresses the major principles of Management Information Systems (MIS) in order to prepare managers to understand the role of information technology and data in the digital economy. This course aims to give students the starters what they need to succeed in the current digital economy.

5. ASSESSMENT, GRADING AND EXAM FEEDBACK

- 1. Lectures, at campus / via zoom, or recorded lectures 24 h
- 2. Assignments integrated to the lectures (60% of the grade, at least 30/60 points must be earned)
- 3. Exam (40% of the grade, at least 20/40 points must be earned). Feedback from the exam will be given via MyCourses news (generally) and via personal appointments to be agreed as needed.

6. SCHEDULE (small changes to program are possible)

#	Date	Topic	Assign. DL's
1	1.3. Tue	Introduction to the MIS course and Chapters 1-2 / Bragge	4.3.2022 at
1	1.5. Tue	(the lecture will also be recorded)	1.3.2022 at
2	3.3. Thu	Knowledge work and knowledge management / PhD Antti Salovaara, Senior University Lecturer, Aalto ARTS, Department of Design	other deadlines to
3	8.3 Tue	The role of data in the modern business / liris Lahti, Al Roots, Founder	be listed at
4	9.3. Wed at 10-12, BI course	Global e-Commerce and new digital business models at Reima / Heikki Lempinen, PhD, Head of Europe, Reima. Joint zoom lecture at Business Intelligence course (https://mycourses.aalto.fi/course/view.php?id=31211)	MyCourses/ Assignment Submissions
	10.3. Thu	(No lecture: Joint lecture at BI course / Zoom on Wednesday 9.3.)	
5	15.3. Tue	Service Design: Process and Methods , CEO Teemu Uotila and Service Designer N.N., Vincit Helsinki	
6	17.3. Thu	Organizational change in the digitalization era-how to bring myth to life? / Business Design Lead Milja Nohynek, Zure Ltd. & Modern Work Lead Karoliina Kettukari, Meltlake (part of Futurice)	
7	22.3. Tue	Beyond ERP - digital efficiencies and transformations / Glen Koskela, Head of Global Portfolio & Partnering, Fujitsu Fellow, Global Retail Division, Finance & Retail Business Group, Fujitsu NOTE: Watch Koskela's previous lecture recording (ERP & business applications) BEFORE attending or watching this new lecture! Log in to Panopto, don't use Safari: https://aalto.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=0952eabc-07b1-4fdb-bacf-ab5a00b33cc2	
8	24.3. Thu	Entrepreneurial approaches to getting from ideas to successful digital businesses / Board professional, Change agent, Strategy advisor, Entrepreneur Petri Aukia, Kamoon Digital, http://twitter.com/aukia	
	29.3. Tue	(No lecture: Joint lectures at BI course / Zoom on Wed. 30.3. and Monday 4.4.)	
9a	30.3. Wed at 10-11, BI course	State of Business Analytics / Juha Teljo, Vice President of Solution Engineering in EMEA, Tableau, a Salesforce company, Joint zoom lecture with BI course.	
10	31.3. Thu	Data economy – how organizations can leverage data? / Taru Rastas, Leading Specialist, A roadmap for a Fair Data Economy, SITRA	
9b	4.4. Mon at 10-12, BI course	Why Tableau? demo / Janne Lind, Lead Solutions Engineer, Tableau, a Salesforce company, Joint zoom lecture with BI course .	
11	5.4. Tue	IT Security and Privacy / Mikko Karikytö, Chief Product Security Officer, Ericsson Finland.	
12	7.4. Thu	Text/web/data mining, course wrap-up hints for the exam / Bragge	
	11.4. Wed	EXAM at 9-12 o'clock	
	June	RETAKE EXAM at 9-12 o'clock	

7. ASSIGNMENTS

NOTE: Small changes are still possible. The assignments have been streamlined based on previous years' student feedback: there are less tools – focusing more on the remaining tools and related topics, there's only one assignment deadline per week (one exception with related assignments 5&6), and the deadlines are on Friday noons instead of Thursday midnights.

The assignments are done independently by the students according to assignment instructions. Discussion with peers is allowed and encouraged, but the submissions are individual. The assignments consist of a variety of tasks: article reviews, easy coding exercises, chatbot building, data exploration & visualization, completing micro-credential courses on data literacy, data analytics & data science and AI in healthcare, research profiling study using library's literature databases and analyzing the results with text-mining. Students earn several badges by completing the assignments.

		Deadlines	
Nr.	Assignment	at noon	Max points
1	Business technology trend reports 2022	Fri 4.3.	6
2	Python programming starters	Fri 11.3.	10
3	Data Analytics, data science and AI in Healthcare (by IBM)	Fri 18.3.	6
4	Building your own chatbot (IBM Watson assistant)	Fri 25.3.	10
5	Data Literacy for All (resource by Tableau)	Tue 29.3.	6
6	Exploring and visualizing data with Tableau Online	Fri 1.4.	10
	Research profiling with Scopus and Text-mining with		
7	Leximancer	Fri 8.4.	10
Diary	Course diary in MyCourses (short reflections on the tools and assignments)	Fri 8.4.	2
Diary	and assignments)	weeks 14-	
Extra	Answering to Aalto's course feedback survey	16	2
	Above assignments, diary and feedback survey in total		62
	Bonus points / can be used to replace part of exam		
	Points from being present at guest lectures at the campus,		
	or in zoom, when the live lecture is arranged only in zoom.		
Bonus	1 point / guest lecture (i.e. lectures 2-11 in above schedule)	Thu 7.4.	10

8. COURSE BOOK (note that the newest edition 5.0 has been added as alternative instead of Ed 3)!

Piccoli, G. and Pigni, F. (2021): Information Systems for Managers Without Cases, Edition **5.0** ISBN: 978-1-943153-85-5 (e-textbook) or 978-1-943153-86-2 (paperback)

https://www.prospectpressvt.com/textbooks/piccoli-information-systems-for-managers-5-0 OR Edition **4.0** from 2019

https://www.prospectpressvt.com/textbooks/piccoli-information-systems-for-managers-4-0

Paperback: Availability in Aalto Learning Centre



9. COURSE WORKLOAD

Classroom or zoom hours and/or recorded lectures	24h
Class/video lecture preparation	10h
Assignments	96h
Preparing for exam	30h
Total	160h (6 op)

10. ETHICAL RULES

Aalto University Code of Academic Integrity and Handling Violations Thereof

 $\textcolor{red}{\textbf{See}} \ \underline{\textbf{https://into.aalto.fi/display/ensaannot/Aalto+University+Code+of+Academic+Integrity+and+Handling+Violations+Thereof} \\$

11. OTHER ISSUES

- Registration to course and to re-exam: Via Sisu
- Course policies: Due to the large amount of students and assignments in the course, the assignment deadlines are strict – however, you may submit your assignment late but there is a sanction which increases the more late you submit (-1 point per every 24 hours late). Turnitln plagiarism software will be used for text-based assignments.