

I062	Obligatory 1 <sup>st</sup> semester	<b>Digital Literacy</b>	L	P	S	ECTS 6
			2	2	1	

**Course objective.** Students will develop the competence to use tools for creating digital content and to distribute it with the use of network technologies.

**Prerequisites.** Undergraduate mathematical or computer science study programme.

**Course content.**

1. Tools for formatting in a network environment. Embedding tables, images, charts, hyperlinks in the formatted text. Publication of documents and collaboration in a networked environment.
2. Tools for creating spreadsheets in a network environment. Conditional formatting. Formatting data. Using functions for data analysis. Defining own functions and functionality using JavaScript programming language. Data visualization using pivot tables and charts. Using network APIs to access the data.
3. Using a network to store and retrieve multimedia content. Creating dynamic web pages using ready-made tools. Using HTML and CSS for extra customization content.
4. Processing systems. Formatted and unformatted data records. Transactional and analytical databases. Information systems.
5. A tool for creating database. Creating and modifying tables. Manipulating data. SQL queries against database. Relations between tables. Reports and forms. Macros.

**LEARNING OUTCOMES**

No.	LEARNING OUTCOMES
1.	Use visual and HTML editor to format and design text in network environment.
2.	Create spreadsheets, use conditional formatting and formulas, visualization, and pivot tables.
3.	Apply basic principles of quality presentation when creating presentation content.
4.	Create conceptual, relational and physical data model for simple problems from the real world, described in natural language.
5.	Use storage in a computer cloud and post, share and retrieve stored contents.
6.	Establish web content using a network environment for creating web pages.

**RELATING THE LEARNING OUTCOMES, ORGANIZATION OF THE EDUCATIONAL PROCESS AND ASSESSMENT OF THE LEARNING OUTCOMES**

TEACHING ACTIVITY	ECTS	LEARNING OUTCOME **	STUDENT ACTIVITY*	EVALUATION METHOD	POINTS	
					min	max
Attending lectures and exercises	1	1-6	Lecture attendance, discussion, team work and independent work on given tasks	Attendance lists, tracking activities	3	10
Seminar	3	1-6	Write seminar papers	Public presentation	20	40
Written exam (Mid-terms)	2	1-5	Preparing for written exams	Verification of correct answers (evaluation)	25	50
TOTAL	6				48	100

**Teaching methods and knowledge assessment.** During exercises, students will create digital content using tools at the lectures. The examination consists of written exam where students demonstrate knowledge of the theoretical basis of the information systems. Students are required to prepare a seminar in one of the featured tools.

**Can a subject taught in English:** Yes

**Basic literature:**

1. S. Dota: A Beginners Guide to Google Drive: Master Google Drive, Docs, Sheets and Slides Now, Amazon Digital Services LLC
2. Andy Williams, WordPress for Beginners 2019: A Visual Step-by-Step Guide to Mastering WordPress, Webmaster Series, 2018.
3. Misty E. Vermaat et al. Shelly Cashman Series Microsoft Office 365 & Office 2016: Introductory, Cengage Learning, 2016.

**Recommended literature:**

1. K. M. Austin, L. B. Berkquist, Introduction to Microsoft Office 2016, Goodheart-Willcox; First Edition, Student Textbook ed. edition (November 20, 2017)
2. Create Your Own Website The Easy Way: The Complete Guide to getting you or your business online, Ilex Press, 2016.