

COURSE DESCRIPTION (Group C)

Course code	Course group	Volume in ECTS credits	Course valid from	Course valid to
KOM5049	C	6	2020/2021	2022/2023

Course type (compulsory or optional)	Compulsory
Course level (study cycle)	Post-graduate
Semester the course is delivered	Autumn Semester
Face-to-face, distance or blended studies	Mixed mode (blended studies: lecture and workshop sessions combined with distance learning and self-study options)

Course title in Lithuanian

Programavimas žurnalistams

Course title in English

Coding for Journalists

Short course annotation in Lithuanian (up to 500 characters)

Šiuolaikinėje visuomenėje žurnalistikos vaidmuo kur kas reikšmingesnis, nei tik skelbti neapdorotus duomenis; o ypatingai svarbiu žurnalisto įgūdžiu yra laikomas jo gebėjimas apdoroti didelius ir dažnai nestruktūrizuotus duomenis, išgauti iš jų vertingą informaciją bei suteikti jai papildomą prasmę. Kai kurios rankiniu būdu atliekamos užduotys užima daug laiko ar net atrodo neįveikiamos; tačiau programos kodo pagalba tinkamai parinkus technologijas tas užduotis galima automatiškai atlikti vos per keletą minučių ar sekundžių.

Short course annotation in English (up to 500 characters)

In the modern society journalism became much more than publishing raw data. The ability to process the big and often unstructured data, extract valuable information and give additional meaning to it becomes an in-demand skill for any journalist. However, some manually performed tasks are time consuming or seem impossible, but can be completed within minutes or even seconds with a script and appropriately chosen programming technologies.

Prerequisites for entering the course

Bachelor diploma, English language B2 level.

Course aim

To demonstrate students how to formalize and solve given tasks with introduced technologies; to teach how to code focusing on the tasks they may need in practice (e.g., scrap data from the Internet; process targeted information in the text; handle data in csv, xlsx files or SQL databases; etc.).

Links among study programme outcomes, course outcomes, content, study and assessment methods

Programme outcomes	Course outcomes	Content (topics)	Study methods	Assessment methods
2. Analytical and research-based competences: 2.1. To identify significant research questions in the field of journalism, media and communications, to initiate and manage scientific and applied research;	Students apply algorithmic knowledge / programming skills to journalistic research (automatic data collection, processing, generalization)	Issues addressed in class sessions: <ul style="list-style-type: none"> Basics of python programming (variable types, conditional sentences, loops, file handling, etc.) Regular expressions for text processing (i.e., search/extraction/replacement of targeted text elements) Named entity recognition Web scrapping Handling csv, xlsx data 	Lectures, self-study sessions	Mini research work, its description and presentation
2.2. To apply qualitative, quantitative and mixed research methodology and empirical data collection techniques in media, journalism	Students gain programming skills; learn about programming libraries for automatic data collection (from the		Lectures, self-study sessions	Tasks requiring algorithmic knowledge and programming skills

and communications research	Internet) and its structuring	files		
3. Professional competences and skills: 3.3. To experiment and critically explore how art and content creation in contemporary journalism are related to affordances offered by emerging media technologies (text, audio-visual, VR, AI)	Students apply algorithmic knowledge and innovative technologies in practical tasks	<ul style="list-style-type: none"> Working with databases: basic SQL statements 	Lectures, self-study sessions	Tasks requiring the right technology choice and their application in practice

Criteria of learning achievement evaluation

Tasks requiring algorithmic knowledge, programming skills, analytical thinking and creativity

Distribution of workload for students (contact and individual work hours)

Study forms	Hours in face-to-face studies	Hours in online studies
Lectures	15	15
Seminars	0	0
Laboratory work	15	15
Practical assignments	0	0
Consultations	0	10
Individual student work	0	90
Total:	160	

Structure of cumulative score and value of its constituent parts

Final Grade (FG, 100%) = HW (mini research work, its description, presentation, 33%) + MT (programming tasks, 17%) + E (programming tasks, theoretical questions, 50%)

Recommended reference materials

No	Publication year	Authors and title of publication (e-source)	Number of copies in University libraries or link to e-source
Basic materials			
1.	Updated in 2020	Python tutorial	Python pagrindai (python basics): https://www.w3schools.com/python/
2.	2018	Tutorials Point (I) Pvt. Ltd. "Python Web Scrapping"	Informacijos iš žiniatinklio traukimas automatiškai būdu/pdf knyga (web scrapping/pdf book): https://www.tutorialspoint.com/python_web_scrapping/python_web_scrapping_tutorial.pdf
3.	2007	Jan Goyvaerts "Regular Expressions: The Complete Tutorial"	Reguliariosios išraiškos/pdf knyga (regular expressions/pdf book) https://www.princeton.edu/~mlovett/reference/Regular-Expressions.pdf
4.	Updated in 2020	SQLite Python	Darbas su duomenų bazėmis (working with DBs) https://www.sqlitetutorial.net/sqlite-python/
Supplementary materials			
Programming forums (e.g. https://python-forum.io/); any literature on related topics			

Course description designed by

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