COURSE INFORMATION SHEET

University: Catholic University in Ružomberok	
Faculty: Faculty of Education	
Course code: KIN/In-BD216A/22	**Course title:** Web Design 3
Type and range of planned learning activities and teaching methods: **Form of instruction:** Lecture / Seminar **Recommended study range:** **hours weekly:** 2 / 2 **hours per semester:** 26 / 26 **Teaching method:** on-site	
Credits: 5	**Working load:** 125 hours
Recommended semester/trimester: 5.	
Level of study: I.	
Prerequisities:	
Requirements for passing the course: The student must master the theoretical knowledge of the subject and also prepare and defend a practical final thesis. Fulfillment of both conditions is demonstrated in the form of a final exam. Final assessment: total percentage gain from mastering theoretical knowledge (50%) and practical final work (50%).	
Learning outcomes of the course: - The student will know the basic technologies for creating web applications and the possibilities of their use. - Can handle the design and creation of web design procedures with specific programming tools and frameworks (ASP.NET Core, EF, RAZOR, HTML5, CSS3, BOOTSTRAP, JAVASCRIPT, JQUERY, AJAX, CSV, JSON, XML ...). - Can handle basic principles of UI/UX, principles of working with text, colors, images and icons. - Practically designs, programs and publishes a modern ASP.NET Core MVC web application using the most modern tools, containerization, or devices and services of the Internet of Things.	
Course contents: 1. Current technologies for creating web applications 2. Cross-platform ASP.NET Core MVC application and page design (RAZOR) 3. Entity Framework, CRUD and possibilities of cooperation with MS SQL, MySQL, SQLite database... 4. ASP.NET Core WEB API and cooperation with web and mobile applications 5. UI and principles of working with text, colors, images and icons 6. UX - user experience 7. Containerization of ASP.NET Core applications and cooperation with Internet of Things devices and services 8. Location of the application and ongoing management of its content (web server, cloud, Raspberry Pi ...) 9. Solving problem tasks in a team, designing, developing and testing a solution using the Internet of Things 10. Practical design and programming of an ASP.NET Core MVC web application, its publishing, monitoring and management	

Recommended or required literature:

PILLÁR, J. 2021. https://moodle.pf.ku.sk/ - electronic support for the subject.
PILLÁR, J. 2017. ASP.NET Core MVC - college textbook. KU, Ružomberok, 2017.
Specialized web portal of the KEGA project: https://UNIoT.sk
ASP.NET Core course online: https://docs.microsoft.com/en-us/aspnet/core/
.NET Core tutorial online: https://docs.microsoft.com/en-us/dotnet/core/tutorials/index
Course RAZOR pages online: https://www.w3schools.com/asp/razor_intro.asp
Bootstrap course online, http://getbootstrap.com
Docker containerization course online: http://www.docker.com

Language of instruction:

Notes:

Course evaluation:

Assessed students in total: 10

A	B	C	D	E	FX
30.0	0.0	10.0	50.0	10.0	0.0

Name of lecturer(s): doc. Ing. Ján Pillár, PhD.

Last modification: 10.07.2022

Supervisor(s):

People responsible for the delivery, development and quality of the study programme:

prof. PhDr. Ingrid Emmerová, PhD., PhDr. ThLic. Martin Taraj, PhD., doc. Ing. Igor Černák, PhD.