

Study programmes: Bachelor studies - Mathematics				
Course name: R130 - Introduction to web and internet technologies				
Lecturers: Filip Marić and other teachers from the Department of Computer science				
Status: Optional				
ECTS: 6				
Attendance prerequisites: RM01				
Course aims: Introduction to basic notions of networking, internet and web. Learning basic web-technologies and gaining knowledge needed to create dynamic interactive web-presentations.				
Course outcome: After the course, the student has master the basic techniques of developing dynamic interactive web-applications.				
Course content:				
<ul style="list-style-type: none"> - Basics of networking and internet. - Internet services and protocols (HTTP, POP3, IMAP, SMTP, FTP). - Meta markup languages SGML and XML. - Markup of web-page content - HTML. - Markup of web-page style - CSS. - Interactive web presentations, DOM, client-side scripting, introduction to JavaScript and some libraries (e.g., JQuery). - Web-servers, Apache - installation and configuration. - Dynamic web-applications, server-side scripting, introduction to PHP. - Introduction to data basis in the web environment. Introduction to DBMS MySQL. Accessing MySQL from PHP. - Asynchronous web-applications, AJAX. - Basics of internet security. Search engine optimization (SEO). 				
Literature:				
<ol style="list-style-type: none"> 1. Филип Марић: Увод у веб и интернет технологије, е-скрипта, Математички факултет, 2013. 2. Josh Hill i James A. Brannan: Брилијантно HTML5 и CSS3, СЕТ, 2011. 3. David Flanagan: Javascript: свеобухватни водич, Микро књига, 2008. 4. Luke Welling, Laura Thomson: PHP и MySQL: развој апликација за веб, Микро књига, 2009. (наставник може изабрати другу одговарајућу актуелну литературу) 				
Number of hours: 5	Lectures: 3	Tutorials: 2	Laboratory: -	Research: -
Teaching and learning methods: Frontal, group, individual and practical.				
Assessment (maximal 100 points)				
Course assignments	points	Final exam		points
Lectures	10	Written exam		-
Exercises / Tutorials	-	Oral exam		-
Colloquia	20	Written-oral exam		50
Essay / Project	20			