

Subject code	Credits
INF3002	6

Course title in Lithuanian
INTERNETO TECHNOLOGIJOS
Course title in English
INTERNET TECHNOLOGY
Short course annotation in Lithuanian (up to 500 characters)

Kurse aptariama informacijos technologijų naudojimo, projektavimo, programavimo įrankių įvairovė. Pristatomos debesų kompiuterijos paslaugos, ir programavimo jose galimybės. Palyginama ankstesnių laikų, ir šiuo metu naudojamų priemonių taikymo galimybės, teikiama nauda. Supažindinama su saugumo svarba.

Short course annotation in English (up to 500 characters)

The course will give an overview of the variety of modern technologies used for design of internet page. During the course student will gain knowledge on the history of internet, web architecture, web protocols, client-server architecture, load balancers, search engine optimization techniques, monitoring and testing of the internet pages, implementation of responsive design and programming techniques. The course structure consists of lectures, laboratory works in computer classroom, as well as individual work.

Prerequisites for entering the course

Fundamentals of programming: Operating systems, Data bases.

Course aim

Understand the modern web page developing techniques.

Content

No	Content (topics)
1.	Thing to remember in internet for developers. Hosting, DNS, services. Project roadmap.
2.	Cloud computing techniques: for user and for developer.
3.	Responsibility of Frontend developer. Technologies such as HTML CSS. JavaScript explained.
4.	PHP from scratch. Internal and external scripts, the syntax, handling strings, Cookies, Sessions.
5.	PHP with data bases. Connecting to the database. Programming web interface to a database. Access and update the records.
6.	Testing web pages. Cross browser/platform compatibility.
7.	Responsive design.
8.	More on security technologies and techniques.

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

Lectures	45 hours
Laboratory work	30 hours
Individual students work	85 hours
Total:	160 hours

Structure of cumulative score and value of its constituent parts

Final written exam (50%), mid-term written exam (17%), and assessments of laboratory (practical) work (33%).

Recommended reference materials

Recommended Reference Materials				Number of copies in		
No.	Publication year	Authors of publication and title	Publishing house	University library	Self-study rooms	Other libraries
Basic materials						
1.	2016	Web Hosting. Beginning for HTML, CSS, PHP				On-line book: http://www.wcsli.stanford.edu/~hinrich/information-retrieval-book.html .
2.	2016	w3schools	Refsnes Data			http://www.w3schools.com
3..	2010	Ethan Marcotte, Responsive Web Design				http://alistapart.com/article/responsive-web-design
4.	2013	Steve Souders. High Performance Web Sites w/ Steve Souders of Google	Google, workshop			https://www.youtube.com/watch?v=iaOhgeCIj0w
5.	2016	Greg Smith.	Bocoup			http://learnlayout.com

		Learn CSS layout				
6.	2016	Learn jQuery				http://learn.jquery.com/
<i>Supplementary materials</i>						
	2013	Kevin Tatroe, Peter MacIntyre, Rasmus Lerdorf. Programming PHP, 3rd Edition. ISBN 978-1-4493-9277-2	O'Reilly Media	Available free on internet: http://it-ebooks.info/book/1857		

Course programme designed by

Vytautas Barzdaitis