

Syllabus

Course Title: Web Information System
Course Code: 07-05
Product Code:

First Creation (Date-Version No.) :

090323-01

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1	20090323-01	16	
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8		23	
9		24	
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12		27	

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Official Approval	Date of Report to PIU

Course Title <Japan-side>	Semester	Day of the week, Period	Credit	Instructor
Web Information System	7	1	2	

Course Description

Nowadays, Internet and World Wide Web becomes more and more popular. Computers with internet environment play an important role in social activities. This course aims at providing students with theory and concept about web information system from the past to future: Internet, WWW, HTTP, HTML, CSS, client-side and server-side dynamic pages, service containers, security, scalability, web services, web 2.0, web 3.0. Ruby and Ruby on rails framework are used to illustrate the technique and programming of Web development.

Focus and Goal

In this course, basic and advanced concepts help students have insightful knowledge about development of web applications.

Courses which students are recommended to enroll in, but not required to

Schedule <Japan-side>	
1 st	Theme: Introduction Keywords: Brief history of Internet and World Wide Web, What is NOT a web system, Typical application, Social impact
2 nd	Theme: HTTP Keywords: Server-client model, Protocol stack, TCP/IP, DNS, URL or URI Request and response, character encoding, media type, request methods, request header fields, response header fields
3 th	Theme: HTML Keywords: Markup and rendering, Syntax of HTML
4 th	Theme: CSS Keywords: Stylesheet, Separating structure and presentation, Syntax of CSS
5 th	Theme: Overview of dynamics pages Keywords: Examples of dynamic pages, Client-side and server-side, 3-tier system
6 th	Theme: Client-side dynamics pages Keywords: Client-side dynamic pages, JavaScript
7 th	Theme: Server-side dynamic pages with Ruby Keywords: Introduction & Ruby Basic, Ruby Basic
8 th	Theme: Server-side dynamic pages with Ruby (2) Keywords: Ruby Advance: #1: Class, Number, String, Array, Hash Ruby Advance: #2: Ranges, Symbols, Booleans, Objects, Variables, Operators, Conditionals, Loops Ruby Advance: #3: Methods, Blocks, Procs, Lambdas, Closures, Classes, Exception handling

9 th	Theme: Server-side dynamic pages with Ruby (3)
	Keywords: Ruby on Rails: introduction & deployment
10 th	Theme: Server-side dynamic pages with Ruby (4)
	Keywords: Static page, layout and modeling, sign up
11 th	Theme: Server-side dynamic pages with Ruby (5)
	Keywords: Log in, log out, Updating, Showing
12 th	Theme: Server-side dynamic pages with Ruby (6)
	Keywords: Account Activation
13 th	Theme: Advanced topic 3: Web 3.0
	Keywords: Metadata, Semantic web, RDF, OWL, SPARQL
14 th	Theme: Mini project
	Keywords:
15 th	Theme: Mini project
	Keywords:
Note	

Out of class assignment

Grading Criteria and Method of Evaluation		
Kind	Percentage	Evaluation Criteria
Examination	%	
Report	70%	
Continuous Assessment	30%	
Others	%	
Note		

Educational advice for enrolled students
Students must complete all tasks which are recommended by lecturers.

Textbooks				
Title	Author	Publisher	ISBN code	Comment
Web Technologies: A Computer Science Perspective	Jeffrey C. Jackson	Prentice Hall	9780131856035	
Note				

Reference books				
Title	Author	Publisher	ISBN code	Comment
Processing XML with Java(TM): A Guide to SAX, DOM, JDOM, JAXP, and TrAX (Paperback)	Elliotte Rusty Harold	Addison-Wesley Professional	9780201771862	Free book online www.freeopenbook.com
Note:				

Internet Websites related to the Course
http://www.w3schools.com/ http://www.w3.org/TR/ http://www.w3.org/2001/sw/ http://www.ibm.com/developerworks/web/ http://java.sun.com/ http://www.apache.org/

Contact

Others