

**COURSE DESCRIPTION FORM**

**Academic Unit:** DEPARTMENT OF INFORMATICS

**Department:** Choose

**Laboratory/Reading-Room/Clinic:** Choose

**Course Title:** Web Information Systems

**Course Code:** PD111

**Type of the Course:** Compulsory (Core)

Background / General Knowledge

Scientific Area

Skills Development (i.e. laboratory, new technologies)

	Total Hours
<input checked="" type="checkbox"/> Lectures	3
<input type="checkbox"/> Seminars	
<input type="checkbox"/> Laboratory Work	
<input type="checkbox"/> Fieldwork	
<input checked="" type="checkbox"/> Project (ie bibliographical case study)	1
<input type="checkbox"/> Tutorial	
<input type="checkbox"/> Internship	
<input type="checkbox"/> Clinical Practice	
<input type="checkbox"/>	

**Cycle / Level of the Course:** 2nd / Postgraduate

**Study Year:** 1o

**Study Semester:** 1o

**Credits (ECTS):** 6

**Course Leader:** Vakali Athina

**Teaching Staff:** Vakali Athina

**Teaching Assistants:** Eirini Giannakidou

### Course Objectives and Outcomes:

a. Describe course objectives / outcomes and competences (knowledge & skills): Understanding Web information Systems principles, identify core issues involved in web information management, implementation of Web-based applications and Web accessing over interfaces. Training on designing and developing of Web-centered applications with special focus on the Social Web. Emphasis on applications which are relevant with entrepreneurship and management.

b. **Categorize course objectives** (select if applicable):

#### Cognitive Domain:

- Remembering
- Understanding
- Applying
- Analysing
- Evaluating
- Creating

#### Affective Domain:

- Reception
- Response
- Valuing
- Organization
- Characterization (internalizing values)

#### Psychomotor Domain (Skills):

- Imitation
- Manipulation
- Precision
- Articulation
- Naturalization

**Prerequisites:** Very good level of English, knowledge of information systems principles, background on Web framework and current Web technologies, usage.

**Course Content:** Basic concepts for Web information systems. Techniques and tools for Web applications development with emphasis on the Social Web. Design and development of Internet Web sites and markup languages summary, data representation on the Web. Script frameworks and languages for developing interactive and dynamic Web applications. Overview of the Web structure and searching tools with emphasis on modern and current practices for Web and Web 2.0 data management. Applications relevant with entrepreneurship and management (Enterprise 2.0)..

#### Recommended Reading:

a. **Recommended bibliography & material** Internet Technologies, C. Douligeris, E. Kopanakis, R. Mavropodi, NIRIIDES, 2004, Athens.

Papers and websites (indicative):

- Berners-Lee, Tim; James Hendler and Ora Lassila : The Semantic Web. Scientific American Magazine.
- ProgrammableWeb: Mashups, APIs and the Web as Platform:  
http://www.programmableweb.com/
- Christian Bizer, Tom Heath and Tim Berners-Lee (in press). Linked Data - The Story So Far. International Journal on Semantic Web and Information Systems, Special Issue on Linked Data.

**b. Additional bibliography:**

- Information Architecture for the World Wide Web: Designing Large-Scale Web Sites by Peter Morville and Louis Rosenfeld, 2006.
- Web 2.0: Concepts and Applications by Gary B. Shelly and Mark Frydenberg, 2010.

**Teaching Methods:**

	<input checked="" type="checkbox"/>	Attending lectures	Individual
	<input checked="" type="checkbox"/>	Practising laboratory skills	
Collaborative (Teamwork)			
	<input type="checkbox"/>	Demonstration (i.e.for fieldwork)	Individual
	<input checked="" type="checkbox"/>	Writing papers	
Collaborative (Teamwork)			
	<input checked="" type="checkbox"/>	Study for a project	
Collaborative (Teamwork)			<input checked="" type="checkbox"/>
Reading books and papers		Individual	
	<input type="checkbox"/>	Critisizing/analyzing others'work	Choose
	<input type="checkbox"/>	Clinical Pracice	Choose
	<input type="checkbox"/>		Choose

**Assessment:**

**a. Description of the procedure:** 2 compuslory projects (one theoretical or involving limited implementation and one involving extended implementation)weighting 40% (assuming the final examinaion mark is at least 4.5/10). Written exams weighting 60%. Evaluation criteria are displayed in the course webpage.  
(i.e. what is consider as important and its weighting. Are there explicitly defined criteria and what are they or where could be found).

**b. Assessment methods:**

	<input checked="" type="checkbox"/>	Multiple Choice Test	
For grading (Summative)			
	<input checked="" type="checkbox"/>	Written Exams	
For grading (Summative)			
	<input checked="" type="checkbox"/>	Written Assignment	
Formative Summative			<input checked="" type="checkbox"/>
Report for a Laboratory		Formative Summative	

Formative Summative	<input type="checkbox"/>	Report for a Fieldwork	Choose
	<input checked="" type="checkbox"/>	Oral Exams	
	<input type="checkbox"/>	Oral Presentation	Choose
	<input type="checkbox"/>	Proodos	Choose
	<input type="checkbox"/>	Continuous Evaluation	Choose
	<input type="checkbox"/>	Computer Assisted Assessment	Choose
	<input type="checkbox"/>	Clinical Examination of Patient	Choose
	<input type="checkbox"/>		Choose
<b>Use of ICT in Course Teaching:</b>	<input checked="" type="checkbox"/>	Use of e-learning platform.	
<b>Digital Course Content:</b>	<input checked="" type="checkbox"/>	Blackboard Hyperlink:	
	<input type="checkbox"/>	eClass	Hyperlink:
	<input type="checkbox"/>	Sakai	Hyperlink:
	<input type="checkbox"/>		Hyperlink:
<b>Language of Instruction:</b>	<input checked="" type="checkbox"/>	Greek	
	<input type="checkbox"/>	English	
	<input type="checkbox"/>	French	
	<input type="checkbox"/>	German	
	<input type="checkbox"/>	Italian	
	<input type="checkbox"/>		

### General Competences

The course students, additional to basic general knowledge in the field of study, are educated to:

- Apply knowledge in practice.
- Retrieve, analyse and synthesise data and information, with the use of necessary technologies.
- Adapt to new situations.
- Make decisions.

- Work autonomously.
- Work in teams.
- Work in an international context.
- Work in an interdisciplinary team.
- Generate new research ideas.
- Design and manage projects.
- Appreciate diversity and multiculturality.
- Respect natural environment.
- Demonstrate social, professional and ethical commitment and sensitivity to gender issues.
- Be critical and self-critical.
- Advance free, creative and causative thinking.

### National Qualifications Framework

Select the levels of learning outcomes that are fulfilled by this course, according to the classification of NQF.

#### Knowledge

- Level 8
- Level 7
- Level 6
- Level 5
- Level 4
- Level 3
- Level 2
- Level 1

#### Competence

- Level 8
- Level 7
- Level 6
- Level 5
- Level 4
- Level 3
- Level 2
- Level 1

#### Skills

- Level 8
- Level 7
- Level 6
- Level 5
- Level 4
- Level 3
- Level 2
- Level 1