

City University of Hong Kong
Information on a Course
offered by Department of Computer Science
with effect from Semester A in 2015 / 2016

Part I

Course Title: Internet Application Development

Course Code: CS5281

Course Duration: One Semester

Credit Units: 3

Level: P5

Medium of Instruction: English

Prerequisites: *(Course Code and Title)*

Nil

Precursors: *(Course Code and Title)*

Nil

Equivalent Courses: *(Course Code and Title)*

Nil

Exclusive Courses: *(Course Code and Title)*

Nil

Part II

Course Aims

This course provides an overview of the platforms, technologies and architectures used in modern Web-based application development. The objective of this course is to ensure that all students have a good balance of practical hands-on development experience as well as systems-level concepts to ensure that they can make intelligent analysis and critique of platforms and technologies for future development work.

Course Intended Learning Outcomes (CILOs)

Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting (if applicable)
1.	compare, analyze and explain different Web architectures;	
2.	explain what are Web standards and their roles and importance in Web development;	
3.	create practical website design with consideration of user requirement;	
4.	propose enhancements over static webpages with client-side script/tools;	
5.	propose designs of server-side programs which interact with client-side elements;	
6.	explain current trends in Web technologies and development.	

Teaching and Learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

Teaching pattern:

Suggested lecture/tutorial/laboratory mix: 3 hrs. lecture/tutorial.

CILO No.	TLAs	Hours/week (if applicable)
CILO 1	Different Web-based architectures will be taught through lectures as well as in-class activities. The coursework will enforce their understanding of how Web-based architectures work.	
CILO 2	Web standards will be covered in lectures. All student-submitted coursework must also follow Web standards such as XHTML and CSS.	
CILO 3	Students are required to design and implement websites using Web standards as part of their coursework, possibly with assistance of utilities and tools.	
CILO 4	Client-side scripting technology will be covered in lectures. Students are required to design make use of client-side Web-based programs as part of their coursework.	

CILO 5	Server-side scripting technology and platform will be covered in lectures. Students are required to make use of server-side Web-based technologies as part of their coursework.	
CILO 6	Current trends in Web technologies and development will be covered in lectures. Students are encouraged to do out-of-class reading to expand their knowledge and make original discovery on current trends in Web development.	

Assessment Tasks/Activities

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	Type of Assessment Tasks/Activities	Weighting (if applicable)	Remarks
CILO 1	Knowledge of Web-based architectures will be assessed partly in the final exam and in students' coursework.		
CILO 2	Knowledge of Web standards will be assessed partly in the final exam and in students' coursework.		
CILO 3	Students' abilities to apply technologies will be assessed mainly in the coursework as well as the final exam.		
CILO 4	Students' abilities for system development will be assessed mainly in the coursework as well as the final exam.		
CILO 5	Students' abilities for system development will be assessed mainly in the coursework as well as the final exam.		
CILO 6	Students' understanding of current trends in Web technologies and development will be assessed mainly in the final exam and/or coursework.		

Grading of Student Achievement: Refer to Grading of Courses in the Academic Regulations for Taught Postgraduate Degrees.

Examination duration: 2 hours

Percentage of coursework, examination, etc.: 50% CW; 50% Exam

Grading pattern: Standard (A+AA-...F)

For a student to pass the course, at least 30% of the maximum mark for the examination must be obtained.

Part III

Keyword Syllabus

History of Internet and the Web, overview of Web-based architectures and platforms, client-server model, browser and web server structures, Web standards and protocols (HTTP, XML, XHTML, CSS), client-side programming (JavaScript), server-side programming (CGI, Java platform, .NET platform, open source platforms, AJAX, Web services), Web 2.0 (concept and technologies).

Recommended Reading

Text(s)

None – Freely available online material will be used

Online Resources