City University of Hong Kong Course Syllabus

offered by Department of Computer Science with effect from Semester B 2017/18

Part I Course Over	view
Course Title:	Introduction to Internet and Programming
Course Code:	CS1303
Course Duration:	One semester
Credit Units:	3 credits
Level:	B1 Arts and Humanities
Proposed Area: (for GE courses only)	Study of Societies, Social and Business Organisations Science and Technology
Medium of Instruction:	English
Medium of Assessment:	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)	CS2204 Fundamentals of Internet Applications Development

Part II **Course Details**

1. **Abstract**

(A 150-word description about the course)

This course aims at providing the fundamental knowledge of Internet and simple programming so that the students can develop their own ideas to showcase their artwork through the use of the Web. Upon completion, students should be able to:

- a) be familiar with the technological options available for presenting content of different media over the Internet
- b) write Web pages with the HyperText Markup Language (HTML) and Cascading Style Sheet (CSS)
- c) use Javascript to program interactive Web pages
- d) design Web applications to showcase their artwork

2. **Course Intended Learning Outcomes (CILOs)**

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs#	Weighting*		ery-eni lum re	
		(if			
		applicable)		g outco	
				tick	where
			approp	riate)	ı
			A1	A2	A3
1.	Explain basic Internet terminologies like TCP/IP and	10%	✓		
	domain, and explore the use of Internet applications like				
	Telnet, FTP, HTTP and VPN.				
2.	Create simple Web sites using HTML and CSS.	20%		√	
2.	Create simple wes sites using HTML and ess.	2070			
3.	Appreciate and discover the use of available Internet	10%	√		
] 3.	**	1070			
	technologies to present different media contents and artwork over the Web.				
	artwork over the web.				
	TY 1 Y	400/			
4.	Use basic Javascript programming in creating interactive	40%		V	V
	Web pages.				
5.	Integrate the techniques learnt to build a showcase	20%		✓	✓
	application.				
* If we	eighting is assigned to CILOs, they should add up to 100%.	100%			

^{*} If weighting is assigned to CILOs, they should add up to 100%.

A1:

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

Teaching pattern:

Suggested lecture/tutorial/laboratory mix: 2 hrs. lecture; 1 hr. tutorial.

TLA	Brief Description		(Hours/week			
		1	2	3	4	5	(if applicable)
1.	Lecturing, discussions, question and answer based tutorial sessions	✓		*			
2.	Instructor led and self-paced exercises focused on individual topics		√	√	√		
3.	Problem Based Learning (PBL) approach is adopted; students are required to implement a Web application project		√	~	√	√	

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities		С	ILO N	Vo.		Weighting*	Remarks		
	1	2	3	4	5				
Continuous Assessment^: 70%									
Quiz	√	√	✓	√		20%	To assess students' understanding of fundamental concepts		
Class participation and assignments		V		√		20%	To assess students' ability to write Web pages with emphasis on structure, style and scripting		
Web application project		✓		✓	✓	30%			
Examination^: 30% (duration: 21)	hours)							

^{*} The weightings should add up to 100%.

100%

[^] For a student to pass the course, at least 30% of the maximum mark for the examination AND continuous assessment must be obtained.

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Class participation and assignments	 1.1 Capacity for learning and understanding the operation of Internet applications and the Web. 1.2 Ability to write simplinteractive Web pages. 	High	Significant	Moderate	Basic	Not even reaching margin level
2. Quiz	2.1 Ability to apply the techniques learnt in Web programming to small problems.	High	Significant	Moderate	Basic	Not even reaching margin level
3. Web application project	3.1 Ability to showcase selected artwork with appropriate Web programming techniques	High	Significant	Moderate	Basic	Not even reaching margin level

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

(An indication of the key topics of the course.)

TCP/IP, Domain, HyperText Transfer Protocol (HTTP), Browser and Web Server, HyperText Markup Language (HTML), Cascading Style Sheet (CSS), Programming languages, JavaScript, Web application design.

Syllabus

- 1. History of Internet, Internet applications and the Web
- 2. HTTP, HTML, CSS, and Web multimedia
- 3. Introduction to computer programming, Javascript (Client-side Scripting)
- 4. Use of Javascript in interactive Web pages and Web Apps
- 5. Programming techniques for building a Web application

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1. Duckett J., (2014). *Web Design with HTML*, CSS, JavaScript and jQuery Set, Wiley, 1st edition.

2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1.	Nixon R. (2011). HTML5 for iOS and Android: A Beginner's Guide. McGraw Hill, 1st edition.
2.	Osborn J. (2011). HTML5 Digital Classroom. Wiley, 1st edition.
3.	Various on-line resources on HTML, CSS and Javascript