



Course Specifications

Course Title:	Internet Application and Web Development
Course Code:	314CIS-4
Program:	Information Systems
Department:	Information Systems
College:	College of Computer Science and Information Systems
Institution:	Najran University



Table of Contents

A. Course Identification	3
6. Mode of Instruction (mark all that apply)	3
B. Course Objectives and Learning Outcomes	4
1. Course Description	4
2. Course Main Objective	4
3. Course Learning Outcomes	4
C. Course Content	4
D. Teaching and Assessment	5
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods	5
2. Assessment Tasks for Students.....	6
E. Student Academic Counseling and Support	6
F. Learning Resources and Facilities	6
1. Learning Resources.....	6
2. Facilities Required	7
G. Course Quality Evaluation	7
H. Specification Approval Data	7



A. Course Identification

1. Credit hours: 4(3,2,1)
2. Course type
a. University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered: Level 6/Year 3
4. Pre-requisites for this course (if any): N/A
5. Co-requisites for this course (if any): N/A

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	90	% 100
2	Blended		
3	E-learning		
4	Correspondence		
5	Other		

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	45
2	Laboratory/Studio	30
3	Tutorial	15
4	Others (specify)	
	Total	90
Other Learning Hours*		
1	Study	25
2	Assignments	20
3	Library	
4	Projects/Research Essays/Theses	15
5	Others (specify)	
	Total	60

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times



B. Course Objectives and Learning Outcomes

1. Course Description

Students will learn basic principles and techniques for building internet applications .This course address the history and fundamentals of the internet, Topics include Programming with HTML, XHTML, cascading style sheets (CSS), and JavaScript, Event handling, client-side and server side technologies, Service oriented Architectures, Server side database management, Web Servers and how they combine together in development of dynamic web application from a selected programming language and environment(either with PHP or .NET and MySQL)

2. Course Main Objective:

The students should be able to understand the concepts of internet technologies and develop real-time applications.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	Identify the basic of technologies in the development of internet application in the modern world.	K1
1.2	Evaluate the several web technologies and application architectures	K2,K3
2	Skills :	
2.1	Recognize the basic Syntax and Semantics of Client side and Server side technologies with Programming Language. (Such as HTML, CSS, JavaScript and PHP/ASP.NET).	S1,S2
2.2	Apply the modern web development tools to design the interactive web applications.	S1,S2,S4
2.3	Develop the real-time Internet Applications using the latest application architectures	S1,S2,S4
3	Competence:	
3.1	Execute the assigned group tasks	C1

C. Course Content

No	List of Topics	Contact Hours
1	Explores advanced and modern concepts and technologies used in the development of internet applications.	6
2	Application development platform and Architecture, Distributed object technologies	4
3	Client side programming such as HTML, CSS, JavaScript	12
4	Client side programming such as HTML, CSS, JavaScript	12
5	Client-side versus server-side technologies	4
6	Server side database management	8
7	Web Server	6
8	Enterprise application integration	2
9	Data transformation and open source technologies	4



10	E-business application installation and deployment issues.	4
11	Programming using Visual studio ASP.NET	28
Total		90

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Identify the basic of technologies in the development of internet application in the modern world.	Put forward some technologies to the students about the developments in internet application development	Theory Exam
1.2	Evaluate the several web technologies and application architectures	The different technologies used for the web development and a comparison of these. The different architectural	Theory Exam
2.0	Skills		
2.1	Recognize the basic Syntax and Semantics of Client side and Server side technologies with Programming Language. (Such as HTML, CSS, JavaScript and PHP).	The basic technologies used for internet application such as html, css and javascript, php. The student need to understand the syntax and semantics of this technologies.	Lab Exam
2.2	Apply the modern web development tools to design the interactive web applications	The syntax and the advanced concepts which are learnt are implemented in the development of the interactive web applications in this CLO	Lab Exam
2.3	Develop the real Internet Applications using the latest application architectures	Make students perform the deployment of the web pages that they develop over the free server and create application sampling from the real life	Lab Exam



Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
3.0	Competence		
3.1	Execute the assigned group tasks	The students are assigned group tasks to develop real internet applications	Assignments

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Theory Assignment 1	5	3
2	Lab Assignment 1	4	3
3	Mid Lab Exam	5	6
4	Mid Term 1	6	15
5	Lab Assignment 2	13	3
6	Theory Assignment 2	11	3
7	Mid Term 2	12	15
8	Lab Performance	Through out the semester	2
9	Final Lab Exam	15	10
10	Final theory Exam	16	40

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

The faculty allocated **10** office hours per week for the students individual consultation
4 weekly academic advising hours

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	X. Bai, M. Ekedahl, J. Farrell, et al, The web warrior guide to Web Programming, Thomson, Course Technology, Latest Edition.
Essential References Materials	H. M. Deitel, P. J. Deitel, Internet & World Wide Web How to Program, Prentice Hall, Latest Edition
Electronic Materials	Tutorials on ASP.NET programming
Other Learning Materials	



2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	20
Technology Resources (AV, data show, Smart Board, software, etc.)	AV, data show, Smart Board: 1 each Visual Studio in the Labs
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Students	Indirect survey
Extent of achievement of course learning outcome	Faculty	Direct using achievement sheet CLO
Quality of learning resources	Students	Indirect survey
Effectiveness of teaching and assessment	Students	Indirect survey

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Department Council
Reference No.	Session No. 10 (441-38-43300)
Date	17/02/2020

