

## INTERNET APPLICATIONS

### IS 345

#### I – Basic Course Information

Programme(s) on which the course is given: Bachelors in CS, IT, and IS  
Major or minor element of programmes: Both Major Minor  
Department(s) offering the programme(s): Information Systems Department  
Department offering the course: Information Systems Department

Academic level: 400 Level  
Semester in which course is offered: First (Fall) Semester  
Course pre-requisite(s):

Credit Hours: 3  
Contact Hours Through:

- Lecture: 3.0
- Tutorial: 0.0
- Practical: 0.0
- Total: 3.0

Authorization date of course specification:

#### II – Professional Information

##### 1. Overall Aims of Course

The course allows students to use web-based applications as implementation option to apply the concepts of information system analysis and design. It prepares the students for the next generation of web based technologies such as SOA.

##### 2. Intended Learning Outcomes of Course (ILOs)

###### a. Knowledge and Understanding

On completing the course students will know and understand:

- a1- All major concepts related to designing and developing a web-based information system.
- a2- How to implement web-applications that use databases on the server side.
- a3- How to design and implement web-applications that use and maintain sessions.

###### b. Intellectual/Cognitive Skills

On completing the course students will be able to:

- b1- Evaluate different technologies to implement web application that is connected to a server based database and implement web applications that is connected to a server based database and rely heavily on GUI for data entry and reports.
- b2- Write Java applications.
- b3- Implement JSP and servlets.

**c. Subject-Specific Practical Skills**

On completing the course the student will be capable of:

- c1- Making use of developed courses and implementing web applications that are connected to a server based database and rely heavily on GUI for data entry and reports.
- c2- Writing Java application.
- c3- Implementing JSP and servlets.

**d. General and Transferable Skills**

On completing the course the student will be able to:

- d1- work in a big group in order to implement the course project
- d2- make a presentation to his work in front of a panel of examiners.
- d3- write the a project report and presentation to document his achievement
- d4- develop any information system using the web technology

**3. Course Contents**

	<b>Topic</b>	<b>No. of hours</b>
1-	Introduction to Web-based information systems	3
2-	Basic Web-based information Systems technologies	6
3-	Server Programming	3
4-	Server-Pages design	3
5-	Using database in web-based information systems	6
6-	Sessions Management	3
7-	Security in web-based Information systems	3
8-	Data validation	3
9-	Trends in the Technology	6
10-		
11-		
12-		

**4. Teaching and Learning Methods**

Select method by checking in the box in front of the method, and type the ILOs' codes in the field opposite the method.

<b>Teaching/Learning Method</b>	<b>To teach/learn the following ILO's</b>
<input checked="" type="checkbox"/> Lectures & Seminars	a1,a2,a3,b1,bc1,c2,c3,d1,d2,d3,d4
<input checked="" type="checkbox"/> Tutorials	d4
<input checked="" type="checkbox"/> Computer-lab Sessions	a1,a2,a3,b1,b2,b3,d4
<input type="checkbox"/> Practical lab work	
<input type="checkbox"/> Reading Materials	
<input type="checkbox"/> Web-site Searches	
<input type="checkbox"/> Independent Work	
<input type="checkbox"/> Group Work	
<input type="checkbox"/> Case Studies	
<input type="checkbox"/> Presentations	
<input type="checkbox"/> Simulation Analysis	
<input type="checkbox"/> Problem-based Learning	
<input type="checkbox"/> Others (Specify):	

### 5. Assessment Methods

Select method by checking in the box in front of the method, and type the ILOs' codes in the field opposite the method.

Assessment Method	To assess the following ILO's	Assessment Weight
<input checked="" type="checkbox"/> Unseen Exams	a1,a2,b1,b2,c1,c2,d3,d4	
<input type="checkbox"/> Open book Exam		
<input type="checkbox"/> Take home Exam		
<input type="checkbox"/> Quizzes		
<input type="checkbox"/> Course Work		
<input type="checkbox"/> Report Writing		
<input type="checkbox"/> Case Study Analysis		
<input type="checkbox"/> Oral Presentations		
<input type="checkbox"/> Practical		
<input checked="" type="checkbox"/> Group Project	d1,d2,d3,d4	
<input type="checkbox"/> Individual Project		
<input type="checkbox"/> Others (Specify):		

### 6. List of References

#### 6.1- Essential books (text books)

Murach's Java Servlets and JSP by Andrea Steelman and Joel Murach  
 Paperback: 642 pages  
 Publisher: Mike Murach & Associates; Pap/Cdr edition (January 2003)  
 Language: English  
 ISBN-10: 1890774189  
 ISBN-13: 978-1890774189

#### 6.2- Course notes:

[www.drehab.net](http://www.drehab.net)

#### 6.3- Recommended books

Web Database Development Step by Step .NET Edition by Jim Buyens  
 Paperback: 560 pages  
 Publisher: Microsoft Press; Pap/Cdr edition (April 10, 2002)  
 Language: English  
 ISBN-10: 073561637X  
 ISBN-13: 978-0735616370

#### 6.4- Periodicals, Web sites, etc ...

None

### 7- Facilities required for teaching and learning

Computer Lab with Computers equipped to run Java programmes and installed on it MySQL database

**Course coordinator: Dr. Ehab Ezzat Hassanien**

**Head of Department: Dr. Galal Hassan Galal El-Deen**

**Date: July, 2007**