

Faculty of Computers and Information Technology

Design of Web-Based Applications

Information :

Course Code : CSC 495

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Faculty of Computers and Information Technology

Instructor Information :

| Title | Name | Office hours |
|--------------------|---|--------------|
| Professor | Awad Hassballah Khalil Matous | 13 |
| Teaching Assistant | Yousef Samir Saad Zaghloul Abdulazeem Allam | 10 |

Area Of Study :

This course includes an over view to the internet services. The student will be able to deal with different websites and search engines. In the lab, the students take the fundamentals of web page design and web site development. Topics include basic HTML/CSS, Client / Server programming, Server side controls, Brief overview Web services.

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Course outcomes :

a.Knowledge and Understanding: :

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|-----|---|
| 1 - | Define the requirements of a web-based application |
| 2 - | Enhance Human-Computer Interaction using emerging technologies and tools |
| 3 - | Get aware of the other emerging tools and technologies for the Web |
| 4 - | Perform Research on the emerging technologies and tools for developing Web applications |

b.Intellectual Skills: :

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|-----|---|
| 1 - | analyze the requirements and design the architecture of a web-based application |
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c.Professional and Practical Skills: :

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| 1 - | Use XHTML and JavaScript to develop the static pages with enforcing the necessary validation |
| 2 - | Use Style sheets to enhance the visualization of Web pages |
| 3 - | Use a server-side tool (ASP.NET) with C# to develop advanced Web applications |
| 4 - | Use emerging technologies and tools for Information Management on the Web (Use Connection Objects ADO.NET and perform secure operations on databases). |
| 5 - | Use XML to develop Web Services |
| 6 - | Use XML as a generic communication language between different entities on the Web |

d.General and Transferable Skills: :

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| 1 - | Work in a team |
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| 2 - | deliver an oral presentation |
| 3 - | Consider and apply professional ethics of the field |

Course Topic And Contents :

| Topic | No. of hours | Lecture | Tutorial / Practical |
|--|---------------------|----------------|-----------------------------|
| Introduction to the Internet and World Wide Web | 4 | 2 | 2 |
| Evolution of the Web, Web 2.0. | 4 | 2 | 2 |
| Design and Development of static Web pages using XHTML | 4 | 2 | 2 |
| Enhancing Human-Computer Interaction Using Scripting Languages | 4 | 2 | 2 |
| Enhancing Visualization Using Cascading Style Sheets (CSS) | 4 | 2 | 2 |
| Midterm Exam I | 3 | 1 | 2 |
| Developing Web Applications Using C# and ASP.NET | 4 | 2 | 2 |
| Information Structuring, Formatting and Management Using XML | 4 | 2 | 2 |
| XSL, XSLT, and XPath | 4 | 2 | 2 |
| Enhancing Dynamic Web Pages Using Ajax | 4 | 2 | 2 |
| Web Services | 4 | 2 | 2 |
| Midterm Exam II | 3 | 1 | 2 |
| Presentation/Discussion of Projects | 4 | 2 | 2 |

Teaching And Learning Methodologies :

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| Lectures |
| Practical training |
| Self-Study |
| Presentation |
| Project |
| Web site searches |

Course Assessment :

| Methods of assessment | Relative weight % | Week No | Assess What |
|------------------------------|--------------------------|----------------|--------------------|
| Final Exam | 40.00 | 15 | |
| Mid-Term Exam1 | 20.00 | 6 | |
| Mid-Term Exam2 | 20.00 | 12 | |
| Project | 20.00 | 13 | |