**BIT 2107 Web Systems and Technologies I (3 CU)**

(a) **Course Description:** The topics covered in this course are: HTML editors; website management tools such as FrontPage and/or Dream weaver; basic Internet technologies such as DNS, email services, LDAP and the HTTP protocol. The practical part of this course introduces tools and techniques for specifying and prototyping interactive World Wide Web applications based on HTML. Web technologies: HTTP Protocol, Presentation abstractions, Web-markup and display languages. The course aims to provide an understanding of the basics of the Internet, how it originated, how it works, and how to develop and maintain Web sites.

(b) **Aims:** This course aims to:

• Provide an understanding of the basics of the Internet, how it originated, how it works, and how to develop and maintain Web sites.

• Provide a basic understanding of Internet related technologies and introductory skills in Web applications.

(c) **Learning Outcomes:** On completion of this course unit, the students will be able to:

• Have essential skills for website management;

Demonstrate understanding of the basic Internet technology concepts and;

• Develop a prototype of interactive World Wide Web applications.

(d) **Teaching and learning pattern**: The students shall be evaluated through the coursework (40%) consisting of Individual Assignment, Tests, a group project, class quizzes, and a final examination (60%)

(e) **Indicative content**:

• HTML editors

• Website management tools such as FrontPage and/or Dream weaver

• Basic Internet technologies such as DNS, email services, LDAP and the HTTP protocol

• Introduction to tools and techniques for specifying and prototyping interactive World Wide Web applications based on HTML

• Web technologies: HTTP Protocol, Presentation abstractions, Web-markup and display languages

(f) **Assessment method**: The students shall be evaluated through the coursework (40%) consisting of Individual Assignment, Tests, a group project, class quizzes, and a final examination (60%)

(g) **Reference Books**:

(i) Instant HTML Programmer’s Reference, Alex Homer, Chris Ullman & UsefulSteve Wright, Wrox,

1998, 1-861001-56-8.

(ii) Internet & World Wide Web – How to Program, H.M.Deitel, P.J.Deitel & T.R.Nieto, Prentice Hall,

2000, 0-13- 016143-8

(iii) XML – How to Program, H.M.Deitel, P.J.Deitel, T.R.Nieto, T.M.Lin & P.Sadhu, Prentice Hall, 2000,

0-13-028417-3

(iv) Website: W 3 Schools: [www.W3C.com](http://www.W3C.com/)

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