**Course Specification**

**(**IT 223 Internet Technology**)**

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| --- | --- |
| **University:** | Helwan University |
| **Faculty:** | Faculty of Computers & Information |
| **Department:** | Information Technology |

**1. Course Data**

|  |  |
| --- | --- |
| **Code:** |  **IT 223**  |
| **Course title:** | Internet Technology |
| **Level:** | 2 |
| **Specialization:** | General |
| **Credit hours:** | 3 hours |
| **Number of learning units (hours):**  | ( 3) theoretical (2 ) practical |

**2. Course Objective**

 This course aims to build the understanding of the essential features of the Internet Computing Architecture, how it is now used and how it has been redefined for the Next generations. It also target the establishment of a practical understanding of related applications, such as the World Wide Web and the Network File System, which are empowering remarkable changes in business and industrial computing practice.

**3. Intended Learning Outcomes:**

1. **Knowledge and Understanding:**

A22. Identify the fundamentals of Networking.

1. **Intellectual Skills**

B22. Negotiate advanced technologies.

B24. Investigate different data formats.

1. **Professional and Practical Skills**

C13. Construct IT facilities.

1. **General and Transferable Skills**

D6. Show Modeling capability.

**4. Course contents**

|  |  |  |  |
| --- | --- | --- | --- |
| Topics | No. of hours | Lecture | Tutorial/ Practical |
| Networking essentials | 3 | 1 | 1 |
| Internet TCP/IP suit | 3 | 1 | 1 |
| Internet domains and Addressing | 3 | 1 | 1 |
| Internet infrastructure and info. structure | 6 | 2 | 2 |
| Internet protocols | 6 | 2 | 2 |
| Internet hardware components | 3 | 1 | 1 |
| Internet and Extranet | 3 | 1 | 1 |
| Multimedia communication over Internet | 6 | 2 | 2 |
| Internet, Audio, Video streaming Website design and application | 3 | 2 | 2 |

 **Mapping contents to ILOs**

|  |  |
| --- | --- |
| Topic | Intended Learning Outcomes (ILOs) |
| Knowledge and understanding | Intellectual Skills | Professional and practical skills | General and Transferable skills |
| Networking essentials | A22 |  |  |  |
| Internet TCP/IP suit | A22 |  |   |  |
| Internet domains and Addressing |  | B24 |   |  |
| Internet infrastructure and info. structure | A22 |   | C13 |  |
| Internet protocols | A22 |  |  C13 |  |
| Internet hardware components |  | B22 |   |  |
| Internet and Extranet | A22 |   |  | D6 |
| Multimedia communication over Internet |  | B22 |  |  |
| Internet, Audio, Video streaming Website design and application | A22 |  |   |  |

**5. Teaching and Learning Methods**

**-**Lectures

-Exercises

-Lab Work

**6. Teaching and Learning Methods for students with limited capability**

* Using data show
* e-learning management tools

**7. Students Evaluation**

1. **Used Methods**
* Written Exams.
* 5.2 Lab work.
* 5.3 Assignments.

 **b) Time**

Assessment 1: Test 1 Week 4

Assessment 2: Test 2 Week 7

Assessment 3: Midterm Exam Week 10

Assessment 4: Practical Exam Week 14

Assessment 5: final written exam Week 16

**c) Grades Distribution**

Mid-term Examination 20 %

Final-Year Examination 50 %

Semester Work 20 %

Practical Exam 10%

 Total 100%

Any formative only assessments

**List of Books and References**

**a) Notes**

* Course Notes

**b) Mandatory Books**

* Musciano & Kennedy: HTML & XHTML: The Definitive Guide (5th ed), O'Reilly, 2002

**c)Suggested Books**

 **d) Other publications**

 - Periodicals, Web Sites … etc

**Course Coordinator: Dr. Nahla El-hagar**

**Chairman of the Department: Prof. Dr.**