**SH. A.**

أكاديميــة الشـروق

**المعهد العالى للحاسبات وتكنولوجيا المعلومات**
**مدينة الشروق ـ القاهرة**
**شعبة علوم الحاسب**

# Course specification

**Course Code:** H 103

**Course Title:** Technical Report Writing

**Academic Year:**    /

# Course specification
## (H 103 Technical Report Writing)

| Course Outline | |
|---|---|
| **Faculty:** | *HICIT- (Higher Institute for Computers & Information Technology-El Shorouk Academy)* |
| **Programme(s) on which the course is given:** | Undergraduate program in Computer Science |
| **Major or minor element of programme:** | Compulsory |
| **Department offering the program** | Department of Computer Science |
| **Department offering the course:** | Department of Computer Science |
| **Level** | 1st Year – 2nd Semester |
| **Date of specification approval** | DD/MM/YYYY |

| Basic Information | | | |
|---|---|---|---|
| *Code:* H 103 | *Title:* | **Technical Report Writing** | |
| **Prerequisites:** | H101 English Language | | |
| **Weekly Hours:** | | | |
| **Lecture:** 2 | **Exercise:** | **Practical :** - | **Total:** 2 credit hours |

## Professional Information

**Course Aims:**

The objective of this course is to give students a working knowledge of technical writing and communication for computer science. It covers the mechanics of writing, including structure, style and clarity, as well as the conventions of sciatic writing in computer science. It will also cover technical documentation, and the mechanics of data analysis, visualization, and communication.

| Program ILOs Covered by Course | | | |
|---|---|---|---|
| **Knowledge and understanding** | **Intellectual Skills** | **Professional and practical skills** | **General and Transferable skills** |
| A1, A2 , A3, A4,A5 | B1, B2,B3,B4 | C1,C2,C3 | D1,D2,D3 |

| Intended learning outcomes of course (ILOs) |
|---|

**a. Knowledge and Under-Standing:**
   A1 - Define technical writing along with its properties.
   a2- Identify some of the most common errors in grammar, punctuation, and spelling.
   a3- List and explain the process of technical writing.
   a4- Recognize and discuss different methods of writing developments.
   a5- Name and discuss basic technical writing elements (i.e. definition, description, instruction) in terms of their structure or what should they contain

**b. Intellectual Skills:**
   b1 - Apply effective ways to present sentences, paragraphs, and tone in order to help produce a document that readers find clear and easy to grasp.
   b2- Write an outline in the appropriate format and style.
   b3- Apply the techniques of document design that ensure that memos and reports to be more attractive and have the sense of professionalism.
   b4- Write a resume and a letter of application.

**c. Professional and practical skills**
   c1 - Apply the technical writing process.
   c2-Write an error free technical writing document.
   c3- Use a word processor package to type, edit, and format the technical writing document, along with inserting digital media and creating a table of contents, styles, etc…

**d. General and transferable skills**
   d1 - Write technical reports for technical projects, Masters and PhD thesis, etc… .
   d2- Write professional resumes and gaining interviewing skills.
   d3- Work in teams.

| Contents | | |
|---|---|---|
| **Topic** | **Contact Hours** | |
| | **lecture** | **Ex/Lab** |
| Introduction to Technical Report Writing | 2 | - |
| Types of Reports and The basic requirements of report writing | 2 | - |
| The rationale for report writing | 2 | - |
| Defining the structure of report | 2 | - |
| Technical Writing Process | 2 | - |
| Using application for creating different Parts of a Technical Report (Formatting-create and modify styles) | 2 | - |
| Using application for creating different Parts of a Technical Report (using header and footnote- and insert citation with creating bibliographical list of source) | 2 | - |
| Writing technical document with changing document properties and correct error  (solving problems) | 2 | - |
| Writing technical document with inserting digital media (image-audio-video-webpage and website) | 2 | - |
| Essay Writing | 2 | - |
| Plagiarism | 2 | - |

| | | |
|---|---|---|
| Resume Writing (creating a cover letter and resume) | 2 | - |
| Practice of Technical document | 2 | - |
| Final Project Presentation | 2 | - |

| Teaching and learning methods | |
|---|---|
| **Teaching and learning methods** | **Used** |
| Lectures | √ |
| Tutorial Exercises | √ |
| Practical Lab | - |
| Discussions. | √ |
| Self – Learning (Reading material, Websites search,) | √ |
| Self-studies | - |
| Group work | - |
| Presentation | √ |
| Problem solving/problem solving learning based | - |
| Case study | - |
| Synchronous E-Learning | - |
| Video lectures | - |
| Asynchronous E-Learning | √ |

| Student assessment methods & Schedule | | |
|---|---|---|
| **Methods** | **Used** | **Week#** |
| Midterm Exam | √ | **8** |
| Final Exam | √ | **16** |
| Course Work & Quizzes | √ | **2-14** |
| **Assessment Weight** | | |
| Assessment | Weight % | |
| Mid Term Exam | 20% | |
| Final Exam | 60% | |
| Course Work & Quizzes | 20% | |
| Total | 100 | |

| Course Work &Quizzes |
|---|
| Short Exams, Assignments, Research, Reports, Presentations |
| Class/Project discussion |

| List of references | |
|---|---|
| **Essential books (textbooks)** | -Shelly Cashman Series, Introductory Microsoft Office 365 Office 2019-(module2: creating a research paper and module3: creating a business letter), 2019<br><br>-Daniel G. Riordan and Steven E. Panley, "Technical Report Writing Today," tenth edition   2014 .<br>- Adrian Wallwork, User Guides, Manuals, and Technical Writing, A Guide to Professional English, Springer Science Business Media New York 2014. |
| **Course notes** | Course material on E-Learning Portal |
| **Recommended books** | The Insider's Guide to Technical Writing– April 4, 2022 by Krista Van Laan |
| **Periodicals, website** | |
| **Videos link** | |

| Required Facilities | | |
|---|---|---|
| Tools & SW (Technology facilities): | Microsoft office 2019 | |
| Teaching facilities: | Whiteboard | √ |
| | Computer Lab | √ |
| | Data show | √ |
| | E-Learning | √ |
| | Videos | √ |
| | Website | √ |

### Course Content/ILO Matrix

| Course Contents | Knowledge & understanding | | | | | Intellectual skills | | | | Professional and practical skills | | | General | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a1 | a2 | a3 | a4 | a5 | b1 | b2 | b3 | b4 | c1 | c2 | c3 | d1 | d2 | d3 |
| Types of Reports - The basic requirements and The rationale of report writing | √ | | | | | √ | | | | | | | | | |
| Defining the structure of report - Technical Writing Process | | | √ | | | √ | | | | √ | | | √ | | |
| Using application for creating different Parts a Technical Report | | | | √ | | √ | √ | | | | | √ | √ | | |

| | a1 | a2 | a3 | a4 | a5 | b1 | b2 | b3 | b4 | c1 | c2 | c3 | d1 | d2 | d3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Writing technical document with providing some techniques | | √ | | | | | | | √ | | √ | | √ | | |
| Essay Writing- Plagiarism - Resume Writing. | | | | √ | √ | √ | | | | √ | | | | √ | |
| Practice of Technical Report - Final Project Presentation | | | | | √ | √ | √ | √ | √ | | √ | √ | √ | | √ |

## Learning Method /ILOs Matrix

| Learning Methods | Knowledge and understanding | | | | | Intellectual skills | | | | Professional and practical skills | | | General | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a1 | a2 | a3 | a4 | a5 | b1 | b2 | b3 | b4 | c1 | c2 | c3 | d1 | d2 | d3 |
| Lectures | √ | √ | √ | √ | √ | | | | | | | | | | |
| Tutorial Exercises | √ | √ | √ | √ | √ | | | | | | | | | | |
| Reading material | √ | √ | √ | √ | √ | √ | √ | √ | | √ | | | | | |
| Websites search | | | | | | | | | √ | | | √ | | √ | |
| Research and reporting | | | | | | | | | | | √ | √ | | √ | |
| Problem solving | | | | | | | | | | | | | | | |
| Group work | | | | | | | | | | | | | | | |
| Case study | | | | | | | | | | | | | | | |
| Practical Lab | | | | | | | | | | | | | | | |
| Discussions. | | | | | | | | | | √ | √ | √ | √ | √ | √ |

## Assessment Methods /ILOs Matrix

| Assessment Methods | Knowledge & understanding | | | | | Intellectual skills | | | | Professional & practical skills | | | General | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a1 | a2 | a3 | a4 | a5 | b1 | b2 | b3 | b4 | c1 | c2 | c3 | d1 | d2 | d3 |
| Mid Term Exam | √ | √ | √ | √ | √ | √ | √ | √ | √ | | | | | | |
| Final Exam | √ | √ | √ | √ | √ | | | | | | | | | | |
| Course Project | | | | | | | √ | | √ | | √ | √ | √ | √ | √ |
| Course Work &Quizzes | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | | | | | |

| Course ILOs \ Prog ILOs | | Knowledge & understanding | | | | | Intellectual skills | | | | Professional and practical skills | | | General | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A3 | A9 | A16 | A17 | A21 | B1 | B4 | B11 | B12 | C7 | C15 | C16 | D1 | D2 | D12 |
| Knowledge and Understanding | a1 | √ | | | | | | | | | | | | | | |
| | a2 | | | √ | | | | | | | | | | | | |
| | a3 | | √ | | | | | | | | | | | | | |
| | a4 | | | | √ | | | | | | | | | | | |
| | a5 | | | | | | | | | | | | | | | |
| Intellectual skills | b1 | | | | | √ | | | | √ | | | | | | |
| | b2 | | | | | | | √ | | | | | | | | |
| | b3 | | | | | | | | √ | | | | | | | |
| | b4 | | | | | | √ | | | | | | | | | |
| Professional and practical skills | c1 | | | | | | | | | | √ | | | | | |
| | c2 | | | | | | | | | | | √ | | | | |
| | c3 | | | | | | | | | | | | √ | | | |
| General skills | d1 | | | | | | | | | | | | | | | √ |
| | d2 | | | | | | | | | | | | | √ | | |
| | d3 | | | | | | | | | | | | | | √ | |

**Course ILOs Vs Program ILOs**

**Course Coordinator : (              )**
**Head of Department: (              )**
**Date:** --/--/2023