National University

of Computer and Emerging Sciences

Department	Computer Science	**Dept. Code**	CS
Course Title	Technical and Business Writing	**Course Code**	SS2007
Pre-requisite(s)	SS1014	**Credit Hrs.**	3
Course Objective:	The purpose of this course is to enable students to understand the definition and the style of technical communication. The students will learn how to produce effective technical documents, like, reports, user manuals, specification, etc. in business and industry. They will learn the universally accepted and international standards of technical communication. Using principles of analyzing and planning to meet the reader's informational needs, students produce proposals, instructions and the various types of informative and persuasive reports used in organizations. In this way, they will develop skills necessary for effective performance in professional life.		

PLO	**Program Learning Outcome (PLO) Statement**	
10	Communication	Communicate effectively on complex computing activities with the computing community and with society at large.
12	Life-long Learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological changes.

CLO	**Course Learning Outcome (CLO)**	**Domain**	**Taxonomy Level**	**PLO**	**Tools**
01	Utilize efficient writing style for producing an effective technical document.	Cognitive	3	10	**A, M, Q**
02	Compose reports for effective performance in professional life.	Cognitive	6	10	**A, F, CA, Q**
03	Design, document, and develop a research project.	Cognitive	6	12	**RP, M, F, Q**

Tool: A = Assignment, M = Midterm, F=Final, CA =Class Activity ,RP = Research Project

Text Book(s)	**Title**	Technical Communication and its applications
	Author	Jerome N. Borowick
	Publisher	Prentice Hall
Ref. Book(s)	**Title**	Technical Writing
	Author	John M. Lannon
	Publisher	Scott Foresman & Co.
	Title	Writing for Computer Science
	Author	Justin Zobel.
	Publisher	Springer.

Assessments	**% Marks**		
1. Assignments	7 %		
2. Quizzes	4 %	5. Mid-Terms	30 %
3. Final Project	5+2 %	6. Final Exam	50 %
4. Class Participation	2 %	**Total:-**	**100**

Weeks	Contents/Topics	CLOs	AI Tools for Students (Guided & Ethical Use)	Assessment Tools
01	• Orientation class • Technical Writing: Definitions, History, Purposes, Functions, Defining Characteristics	1	**ChatGPT** (definitions & examples), **Gemini** (comparison of definitions)	A1, M1, Q1
02	• The Technical Style: Clarity, Precision, Objectivity, Simplicity, & Economy	1	**Hemingway Editor**, **Grammarly Free** (clarity & conciseness checks)	A1, M1, Q1
03	• The Technical Writing Process- Purpose analysis & Audience Analysis • Data Collection & Analysis- Primary & Sources, Qualitative & Quantitative Data **Quiz 1 from topics of week 1 & 2.**	1	**ChatGPT** (audience analysis prompts), **Google Forms** (survey drafts)	A2, M1
04	• Constructing Effective Paragraphs for the technical prose • Writing Synthesis Essay • Introduction to Citation and Referencing **Class Assignment 1: Synthesis Essay (Deadline: week 5)**	1	**Zotero**, **Scite.ai**, **ChatGPT** (idea integration, not writing)	A1, M1
05	• How to write instructions in user guides • **Assignment 2: Making a User guide (Deadline: week 8)**	2	**Notion AI**, **Canva Docs**, **ChatGPT** (step ordering & clarity)	A2, F
06	**MID 1**			
07	• CV/Resume Writing • Cover Letters • **Assignment 3: Resume writing (Deadline: week 10)**	2	**Resume Worded**, **Grammarly**, **ChatGPT** (bullet improvement)	A3, M2
08	• How to read a Research Paper • Introduction to Scientific Research • Research Proposal	3	**Elicit.org**, **Research Rabbit**, **ChatGPT** (proposal outlines)	FP, M2, Q2
09	• The Technical Report: Writing the Introduction and Literature Review Sections	3	**Connected Papers**, **Scite.ai**, **ChatGPT** (gap identification)	FP, M2,F, Q2
10	• Technical Reports: Method, Results, Conclusion and Recommendation Sections	3	**Grammarly**, **ChatGPT** (section differentiation & tone)	FP, M2, Q2
11	• **Quiz 2 from topics of week 8, 9, & 10.** • Preparing Prefatory Parts for Technical Reports: Title Page, Table of Contents, Letter of Transmittal, Abstract, & Executive Summary	3	**Canva Docs**, **ChatGPT** (abstract vs executive summary)	FP, M2
12	**MID-II**			
13	• Supplementary Parts • Short Survey Report	3 2	**Google Forms**, **Excel AI**, **ChatGPT** (data interpretation)	F
14	• Feasibility Studies **(Class Participation 1-Activity)** • Progress Reports **(Class Participation 2- Activity)**	2	**Notion AI**, **ChatGPT** (planning & structuring reports)	F, CP
15	• Technical Proposals (**Class Participation 3- Activity)** • Professional Emails **(Class Participation 4- Activity)**	2	**Grammarly**, **Outlook Copilot**, **ChatGPT** (tone & clarity)	F, CP
16	• Revision • Project Presentation	3	**Canva**, **Gamma AI**, **ChatGPT** (presentation rehearsal)	F, CP

Responsible Use of AI Tools in Technical & Business Writing (SS2007)

This course allows guided and ethical use of Artificial Intelligence (AI) tools to support learning, clarity, and revision. AI is a learning assistant, not a replacement for student thinking or writing.

Permitted Uses

Students may use AI tools for:

- Brainstorming ideas and outlines
- Understanding writing formats (reports, proposals, emails, resumes)
- Improving clarity, grammar, coherence, and tone
- Summarizing sources after reading them independently
- Checking structure and logical flow
- Preparing presentations and visual aids

Prohibited Uses

Students may NOT:

- Submit AI-generated text as their own work
- Use AI to write full assignments, reports, or essays
- Use AI during quizzes, midterms, or exams
- Bypass reading, research, or drafting processes

Academic Integrity

- All submitted work must reflect the student's own ideas, organization, and voice
- Excessive or unethical AI use may result in penalties under university plagiarism policies
- Students may be asked to explain or defend their written work orally

Rule of Thumb:

If AI helps you think → allowed

If AI thinks for you → not allowed