University of Asia Pacific (UAP)

Department of Computer Science and Engineering (CSE)

BSc in CSE Program

Course Outline – Technical Writing and Presentation

Part A – Introduction

1. **Course Code:** ENG 300
2. **Course Title:** Technical Writing and Presentation
3. **Course Type:** Core course
4. **Level/Term and Section:** 3rd Year 1st Semester
5. **Academic Session:** Spring 2025
6. **Course Instructor: Md. Shahidul Islam**, Assistant Professor; **Dr. Homeyra Akter**, Assistant Professor; **Nayeema Sultana**, Lecturer; **Al Amin Sany**, Lecturer
7. **Prerequisite (If any):** Nil
8. **Credit Value:** 1.5
9. **Contact Hours:** 3.0
10. **Total Marks:** 100
11. **Course Objectives and Course Summary:**

The objectives of this course are to:

1. Understand the fundamentals of technical writing specific to Computer Science and Engineering.
2. Develop effective oral presentation skills tailored to the field's requirements.
3. Demonstrate expertise in the preparation of essential technical documents such as reports, research papers, theses, and books.
4. Utilize essential writing and presentation tools such as LATEX and diagram drawing software proficiently.

This course is structured to provide students with fundamental skills in technical writing tailored specifically to the disciplines of Computer Science and Engineering. Through an exhaustive examination, students will acquire a comprehensive understanding of the nuanced aspects of effective technical writing and oral presentation. Central themes encompass comprehension of the foundational principles underpinning technical writing, mastery of diverse writing styles applicable to definitions, propositions, theorems, and proofs, and proficiency in the creation of an array of technical documents including reports, research papers, theses, and books. Additionally, students will develop adeptness in utilizing essential writing tools such as LATEX, alongside diagram drawing software and presentation tools, to optimize the visual representation and delivery of technical information.

12. Course Learning Outcomes: at the end of the Course, the Student will be able to –

CLO 1	**Explain** the structure and characteristics of standard technical documents.
CLO 2	**Create** scientific reports and presentations with clear structure, meaningful visuals, and accurate technical content.
CLO 3	**Deliver** well-organized and compelling presentations using clear articulation, confident body language, and impactful communication techniques.
CLO 4	**Use** modern engineering tools and techniques to produce technical documents such as scientific reports, research papers, theses, and books with correct grammar, style, and structure.

13. Mapping / Alignment of CLOs with Program Learning Outcomes (PLO) (Optional):

CLO No.	Corresponding PLOs (Appendix-1)	Bloom's taxonomy domain/level (Appendix-2)	Delivery methods and activities	Assessment Tools
CLO1	j	1/Understand	Lecture, Discussion, Example analysis	Classwork, Viva
CLO2	j	1/Create	Lecture, Practical exercises	Assignment, Project
CLO3	j	3/Organization	Lecture, Practical exercises	Presentation
CLO4	e	1/Apply	Lecture, Practical exercises	Assignment, Presentation, Project

Part B – Content of the Course

14. Course Content:

15. Alignment of topics of the courses with CLOs:

SL. No	Topics / Content	Course Learning Outcome (CLO)

1	Technical Writing and Oral Presentation	**CLO3, CLO4**
2	Writing Styles: Definitions, Propositions, Theorems, Proofs	**CLO1, CLO4**
3	Preparation of Technical Documents: Reports, Research Papers, Theses, Books	**CLO1, CLO4**
4.	Proficiency in utilizing writing tools, diagram drawing software, and presentation tools	**CLO2, CLO4**

16. Class Schedule/Lesson Plan/Weekly plan:

Topics	**Specific Outcome(s)**	**Time Frame**	**Suggested Activities**	**Teaching Strategy(s)**	**Alignment with CLO**
Introduction to Technical Writing and Presentation		Week 1		Lecture, multimedia	CLO1, CLO4
Writing Styles, Introduction to LaTeX basics		Week 2		Lecture, Hands-on Practice	CLO1, CLO4
Advanced LaTeX features: Mathematical equations, bibliographies, figures, tables, Customizing LaTeX documents		Week 3-5		Lecture, Hands-on Practice	CLO4
Creating presentations using PowerPoint		Week 6		Lecture, Hands-on Practice	CLO2
MID-TERM EXAMINATION		Week 7			
Presentation delivery		Week 8		Lecture, Hands-on Practice	CLO3

Creating technical documents using Latex		Week 10-12		Lecture, Hands-on Practice	CLO4
Final presentations: live demonstrations, audience engagement, effective delivery, peer and instructor feedback		Week 13-14		Hands-on Practice, Group Discussion, Presentation	CLO1, CLO2, CLO3
FINAL EXAMINATION		Week 15			

17. Teaching-Learning Strategies:

18. Assessment Techniques of each topic of the course:

Part C – Assessment and Evaluation

19. Assessment Strategy:

Assignments: Throughout the semester, written assignments and presentations will be given to assess students' understanding and application of technical writing principles and presentation skills.

- Assignments will cover various aspects of technical writing, including LaTeX document creation, customization, and collaborative writing, as well as presentation design and delivery.
- Presentations will focus on topics related to effective presentation techniques, such as design principles and use of visuals.

Final Presentation: At the end of the semester, students will deliver a final presentation, showcasing their mastery of technical writing and presentation skills. This presentation will be evaluated based on clarity, organization, visual aids, and overall effectiveness in communicating complex technical concepts.

CIE- Continuous Internal Evaluation (50 Marks)

Bloom's Category	**Assignments (20)**	**Continuous Assessment (30)**
Remember		
Understand		

Apply		**20**
Analyze		
Evaluate		
Create	**10**	**10**
Organization	**10**	

SMEB- Semester Mid & End Examination (50 Marks)

Bloom's Category	**Marks**
Remember	
Understand	**5**
Apply	**25**
Analyze	
Evaluate	
Create	**10**
Organization	**10**

20. Evaluation Policy

Grades will be calculated as per the university grading structure and individual student will be evaluated based on the following criteria with respective weights.

1. Assessment 30%
2. Assignment 20%
3. Mid and Final Assessment 50%

UAP Grading Policy

Numeric Grade	Letter Grade	Grade Point
80% and above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25

60% to less than 65%	B	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	D	2.00
Less than 40%	F	0.00

Part D – Learning Resources

21. Text Book

1. Sharon J. Gerson, Steven M. Gerson, "Technical Writing Process and Product", Sixth Edition, 2009, Revised 2017

Reference Books & Materials

1. “Engineers’ Guide to Technical Writing”, Kenneth G. Budinski, ASM International