

Course	ENR306 Technical Communication	Semester	Monsoon Semester 2024
Faculty Name(s)		Contact	
School	SEAS	Credits	1
GER Category:	Not Applicable	Teaching Pedagogy Enable:NO	P/NP Course: Can not be taken as P/NP
Schedule	Not Applicable & COM101 Effective Reading and Comprehension Skills & COM102 Advanced Writing		
Prerequisite			
Antirequisite	Not Applicable		
Corequisite	Not Applicable		
Course Description	Engineering graduates have to frequently prepare reports and make presentations. Ability at communication, in general, and technical communication, in particular, is an essential requirement in any organization. This course will be a first exposure to professional practices in technical writing which would include preparation of reports, proposals, poster presentations, oral presentations, and popular writing, amongst others. This skill will be put in practice during project and laboratory work.		
Course Objectives	The course objectives are (a) introduce engineering students to the importance of communication skills in engineering, (b) make students aware of writing and editorial styles for different purposes, (c) develop the ability to organize and conceive different forms of communication (d) give practice in communication forms/modes, such as, project report, abstract, executive summary, project proposal, poster preparation, AV presentation, video preparation, illustrations, graphs and equations.		

Learning Outcomes	Outcomes Upon successful completion of the course, the student will be able to (a) develop the broad contours of a communication mode, (b) prepare a report, slides or video for engineering communication, (c) make high quality technical documents, etc. and avoid common shortcomings, (d) be able to write a good quality professional report in subsequent courses.		
Pedagogy	The course sessions will include a combination of a briefing by instructor, prior instructions, followed by practice session and home work. Each week will be devoted to one activity/practice session in-class for which instructors will give feedback; this will be followed by a home work.		
Expectation From Students	Students should remain well prepared to participate in each session and remain interactive.		
Assessment/Evaluation			
Attendance Policy	As per Ahmedabad University Policy.		
Project / Assignment Details	N.A.		

Course Material

Other Course Material

Ivan Valiela, *Doing Science*, Oxford, 2009

Trevor M Young, *Technical Writing A-Z: A Communications Guide to Engineering Reports* and *Theses*, ASME, 2005

IEEE Editorial Style Manual

D. Al-Othmany and M. Solaiman Ali, "How to be an effective technical writer?," *Proceedings* of the 2012 IEEE Global Engineering Education Conference (EDUCON), 2012, pp. 1-8, doi: 10.1109/EDUCON.2012.6201188.

Issues of IEEE Xplore, ASME Mechanical Engineering, etc.

Videos from YouTube

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Additional Information	The course total marks will be distributed for each weekly activity. The course grade will be prepared on the basis of total marks earned.	

Session Plan

NO.	TOPIC TITLE	TOPIC & SUBTOPIC DETAILS	READINGS,CASES,ETC.	ACTIVITIES	IMPORTANT DATES
1	Introduction to the course.	In class: Reading sample reports and analysing them. HW: Viewing a video and writing a brief report.			
2	Report writing practices	– grammar, style, organizing ideas, In class: Editing a document HW: Editing (physical and soft copy) of a document			
3	Report writing – describing a device or programme In class	Visit a practical set-up or device/equipment (physical) and write a description. HW: Writing about an engineered product			
4	Report writing – describing a process/activity In class	Watch a video of activities being performed and describe them in a report. HW: View an activity real/video and describe it in a report.			
5	Report writing – describing a picture/photo In class	Describe a given picture and its technical aspects, in words. HW: Make a picture of a device/equipment and write about it.			
6	Video based communication In class	View videos and analyse/critique them. HW: Make a video for a given purpose.			
7	Software and programming communication	Programme documentation; Program requirement description; Introduction to User manual, and Programmers' manual, UX In class: Critique manuals for a given programme. HW: Write manuals for a given programme.			

8	Basics of communicating with graphs and plots; Placement in a text and referencing.	In class: Describe given graphs and plots HW: For given information, prepare a graph/plot and write a brief description. (could be from a courses already done)		
9	Basics of communicating with equations; Placement in a text, numbering, and referencing.	In class: Write the description of given document with equations. HW: For given information, write the equations and describe them. (could be from courses already done)		
10	Basics of referencing and citing. List of references, bibliography. In class:	Study various documents and their referencing styles. For a given text, prepare the list of references. Critique referencing in a given document. HW: From a given rough outline and references, prepare a brief report with proper referencing.		
11	Basics of planning and making a presentation and/or recording it In class	View presentations and write their critique. Prepare the outline of a presentation for a laboratory work done earlier. HW: Prepare slides and record a presentation.		
12	Presentation practice In class	Prepare slides and a presentation for topics from an earlier course. HW: Prepare slides and record presentation.		
13	Plagiarism – what it is and what it is not In class	Check a given document for plagiarism. HW: Re-write a document that has plagiarism in your own words so that there is no plagiarism.		