# Pokhara University Faculty of Science and Technology

Course No.: Full Marks: 100
Course Title: Communication Techniques (2-2-0) Pass Marks: 45

Nature of the Course: Theory Time per Period: 1 hour

Year: First Total Periods: 30

Level: Undergraduate

Credits: 2 Program: BE

# 1. Course Description

This course is designed to offer a comprehensive introduction to first-year engineering students to strategies that will help them create effective technical documents and presentations.

It covers the entire gamut of technical communication in thirteen major parts, namely, thinking about the audience, purpose, and genre; ethical issues; researching; technical writing; designing documents; visual communication; communication in the workplace; writing proposals; reporting information; writing how-to documents; reporting document usability; taking communication online; and presenting communication orally.

This course takes a rhetorical approach to technical communication. This means that instead of setting up a list of rules that students should apply uniformly to all writing situations, this course introduces them to the bigger picture of how the words they write can affect the people intended to use them. By understanding who the readers or users are and what they need in a technical document, students can adapt their knowledge to their situations to provide them with what they need and this will facilitate how to educate themselves as well as facilitate the learning of others. There are also several different kinds of exercises and assignments. in-class exercises are short assignments intended to be done by students in class in 15 or 20 minutes. They ask students to use the main ideas discussed in the previous section and to think critically about those ideas. There are also assignments and major projects, and these group activities further learning through opportunities to work with others, to discuss the course content, and to hear others' bright ideas that might spark greater creativity overall.

## 2. General Objectives

The objectives of the course are to enable students to

- practice technical writing strategies
- apply the concepts that they need to make good decisions about how to write a document
- guide them in developing a good working draft
- test their document with members of the target user group and receive constructive feedback
- present usable information on a specialized (and usually technical) subject
- write technical proposals, reports, and documents
- make oral technical presentations
- communicate in the workplace.

#### 3. Methods of Instruction

In this course the idea is that students should read the chapter prior to class and, when they get to class, the teacher can quickly summarize for them the main points to which they should pay attention. Then the teacher can assign an exercise that will reinforce the theoretical concept and get students started working with it. There are also several different kinds of exercises and assignments: in-class exercises are short assignments intended to be done by students in class in 15 or 20 minutes, and here students use the main ideas discussed in the previous section and think critically about those ideas; lab assignments are slightly longer than in-class exercises, but they are still intended to be completed (or at least worked on) during a class meeting; the third type of assignment is the major project, which is a longer, more formal assignment that has students consider the main concepts from the chapter (or chapters) to produce an effective example of one of the main genres of technical communication. The teacher can assign the major project at the beginning of a particular unit of study and have it due the following week or at the end of the term, depending on the teacher's course plan and schedule. It is also important to have the students work collaboratively on the in-class and lab assignments. Depending upon the teacher's course goals, they may decide to cover the chapters in the order in which they are presented in the syllabus but they can use the chapters in the order that suits their students' needs and the assignment schedule.

### 4. Contents in Detail

The course is divided into eight units of two weeks each.

Weeks	Specific Objectives	<b>Course Contents</b>
1-2	Introducing the basic concepts of audience, purpose, and genre; Introducing ethical issues and conducting research  Writing for the workplace;	Thinking about audience, purpose, and genre; Leading and misleading the reader: - ethics at work - ethics for students - how is ethics related to technical communication? - researching technical subjects Writing email and letters for the workplace;
3-4	Style in technical prose	<ul> <li>writing email and retters for the workplace,</li> <li>writing messages: email, memos,</li> <li>letters</li> <li>writing messages: informative,</li> <li>positive, negative, persuasive</li> <li>how is ethics related to technical communication</li> <li>Writing technical prose:</li> <li>clarity, cohesion, conciseness,</li> <li>parallelism</li> </ul>
5-6	Designing technical documents; Incorporating visuals into technical documents	Designing documents and page layout; Communicating through visuals
7-8	Writing effective proposals; Writing instructional documents	Writing winning proposals; Writing how-to documents: - instructions, procedures, and manuals
9-10	Testing instructional documents;	Testing and reporting document usability;

	Reporting technical information,	Reporting technical information:		
	part 1	<ul> <li>recommendation reports</li> </ul>		
11-12	Reporting technical information,	Reporting technical information:		
	part 2;	<ul> <li>white papers or information reports;</li> </ul>		
	reporting technical information, part	Taking technical communication online:		
	3 and accessing technical	- sharing documents electronically		
	documents online			
13-14	Writing documents to be used	Taking technical communication online:		
	online;	<ul> <li>writing online documents;</li> </ul>		
	Status or progress reports	Reporting technical information:		
		- status or progress reports		
15-16	Presenting technical information	Oral presentation of technical reports;		
	orally;	Student presentations of major project		
	Students present some aspect of			
	their major projects			

# 5. Evaluation System and Students' Responsibilities

## **Evaluation System**

In addition to the formal exam(s), the internal evaluation of a student may consist of quizzes, assignments, project work, class participation, etc. The tabular presentation of the internal evaluation is as follows.

<b>External Evaluation</b>	Marks	Internal Evaluation	Weight	Marks		
Semester-End Examination	50	Attendance & Class Participation	10%			
		Assignments	20%			
		Presentations/Quizzes	10%			
		Term exam	60%			
		Total Internal		50		
Full Marks: $50 + 50 = 100$						

## 6. Student Responsibilities

Each student must secure at least 45% marks in internal evaluation with 80% attendance in the class in order to appear in the Semester End Examination. Failing to get such score will be given NOT QUALIFIED (NQ) and the student will not be eligible to appear the Semester-End Examinations. Students are advised to attend all the classes, formal exam, test, etc. and complete all the assignments within the specified time period. Students are required to complete all the requirements defined for the completion of the course.

## 7. Prescribed Books and References

## **Text Book**

Graves, H., & Roger, G. A Strategic Guide to Technical Communication. 2<sup>nd</sup> ed., London: Eurospan Group, 2012.

#### References

- Greenlaw, R. Technical Writing, Presentation Skills, and Online Communication: Professional Tools and Insights. IGI Global, 2012.
- Gurak, L. J. & John, M. L. Strategies for Technical Communication in the Workplace. 2<sup>nd</sup> ed., Pearson, 2013.
- Kmiec, D. & Bernadette, L. *The IEEE Guide to Writing in the Engineering and Technical Fields*. Wiley, 2017.
- Markel, M. Technical Communication. 11th ed., Bedford/St. Martins, 2015.
- Mirel, B. & Rachel, S. eds. *Reshaping Technical Communication: New Directions and Challenges for the 21st Century.* Lawrence Erlbaum, 2002.