SCHOOL OF MATHEMATICAL SCIENCES
Bachelor in Mathematical Sciences (B.Math.Sc.)

Course of Study

Code No.: MSEN 401   Full Mark: 75
Paper: **Technical Writing and Communication English**   Pass Mark: 30
Nature: Theory   Credit: 3

Course Description:

As a pre-professional, learning how to develop appropriate, timely, and persuasive documentation prepares you for the fast-paced demands of an employer, colleagues, and clients. Although any style of writing takes a lifetime to develop, learning the key elements of professional documentation will enhance and shape how people make critical decisions or make changes in habits. This course will expose you to the professional and technical situations you may encounter in a workplace setting and prepare you to perform audience analyses, usability testing, persuasive communication, tailored documentation, and most importantly how to write with clarity, concision, style, and appropriate tone.

Learning Objectives:

After successfully completion of this course the students will be able to:

1. Familiarize themselves with the plain English approach to writing
2. Recall general technical writing characteristics by developing technical documentation
3. Describe the benefits and constraints of an informational document for an intended audience through informal usability testing
4. Demonstrate persuasive communication techniques in technical writing documentation
5. Develop abilities to differentiate genre conventions for specialized and general audiences by tailoring professional documents
6. Design and revise documentation for clarity, concision, style, and tone from peer review feedback

Mode of Delivery:

The course will be taught by lecture (48 hrs), and problem solving and class discussion (24 hrs). The use of spreadsheet software for problem solving will be encouraged.

Contents

Unit1 Plain English **11 hrs**

Plain English, Style: writing a readable sentence, Organization: getting to the point, Layout: adding visual impact, A model for writing.

Unit 2 Understanding the Technical Communication Environment **8 hrs**

Introduction to technical communication, Understanding ethical and legal considerations, Writing technical documents.

Unit 3 Planning the Document   **8 hrs**

Analyzing audience and purpose, Writing informational reports, Organizing information.

Unit 4 Developing and Testing the Verbal and Visual Information   **12 hrs**

Communicating persuasively, Emphasizing important information , Creating graphics, Designing print and online documents.

Unit 5 Learning Important Applications   **9 hrs**

Writing job application materials, Writing definitions, descriptions and instructions.

Textbooks
1.   Edward P. Bailey, Jr., *The Plain English Approach to Business Writing*, Oxford University Press, New York, 1997
2.   Mike Markel, Stuart A. Selber, *Technical Communication*, 12th edition, Bedford/St. Martin's, Boston, 2017

References
1.   Mike Markel, *Practical Strategies for Technical Communication*, Bedford/St. Martin's, Boston, 2016.
2.   Meenakshi Raman, Sangeeta Sharma, *Technical Communication Principles and Practice*, Oxford University Press, India, 2015.
3.   Martin Cutts, *Oxford Guide to Plain English* , Oxford University Press, UK, 2013.
4.   Sharon J. Gerson, Steven M. Gerson , *Technical Communication Process and Product*, Prentice Hall, 2012.
5.   Kathy Gemmell, *The Write Stuff* , Emphasis, UK, 2015.

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