

Discipline: Electronics
ENE-Engineering

Degree Credit [X]
Non Credit []
Nondegree Credit []
Comm Service []

Riverside Community College District Integrated Course Outline of Record

Electronics 27

ELE-27: Technical Communications
Same as: ENE- 27

College: R___ M___ N___ X
Lecture Hours: 54
Lab Hours: 0
Units: 3.00

COURSE DESCRIPTION

Prerequisite: None.

Procedures for organizing and presenting technical data through informal and formal documents and presentations. Includes practice in writing memoranda, letter reports, and formal technical reports. Also includes discussion of personal resume and preparation of job applications. 54 hours lecture.

SHORT DESCRIPTION FOR CLASS SCHEDULE

Procedures for organizing and presenting technical data. (Same as ENE-27)

ENTRY SKILLS

None.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, students should be able to:

Define technical communications

Recognize and identify characteristics of technical communications

Identify the needs of a given audience

Collect and organize information

Create technical documents in accordance with conventional formats

Write descriptive and operational instructions for nontechnical users of technical information

Properly integrate graphs, tables, and references into technical reports

Conduct an informational interview

Assemble a personal data book; and

Compose a personal resume with cover letter.

COURSE CONTENT

1. Introduction to technical writing
 - a. The purpose of technical writing
 - b. Benefits of technical writing
 - c. Avoiding the typical problems of the technical writer
2. The writing process
 - a. Getting ready to write
 - b. Assessing the audience
 - c. Covering the knowledge domain
3. Ensuring clarity and readability
 - a. Writing technically
 - b. Architecting sentences that communicate
 - c. Managing style in technical writing
4. The mechanics of writing
 - a. Technical writer's tools
 - b. Writing in the right style
 - c. Editing for quality
 - d. Maintaining document structure
 - e. Methods of explanation
5. Designing the document
 - a. Audience-driven document design

- b. Determining the document types
 - c. Building documents
 - d. Prototyping the document
6. Develop the look of the document
- a. Designing the appearance of your page
 - b. Conveying information with graphics

METHODS OF INSTRUCTION

Methods of instruction used to achieve student learning outcomes may include, but are not limited to:

- Present class lectures/discussions in order to assist students in achieving the learning outcomes by reviewing relevant course content.
- Perform assigned writing assignments in order to expose the student to situations/problems which reinforce lecture presentation material.
- Develop and assign problem solving tasks and activities in order to assist the student in achieving learning outcomes.
- Show videos, films, and slides and provide handouts in order to give the student a better feeling of exposure to activities in industry and related fields.
- Pair and small group activities, discussions, and exercises in order to promote discovery and enhance problem solving skills.
- Invite or visit guest lecturers in order to bring current industry experience directly into the classroom and help students attain objectives through direct interface with active professionals.

METHODS OF EVALUATION

Students will be evaluated for progress in and/or mastery of learning outcomes by methods of evaluation which may include, but are not limited to:

- Individual and group assignments designed to demonstrate successful understanding and application of basic concepts and definitions of technical communication.
- Questions on topics and content designed to evaluate students' understanding of the key approaches to technical communication/writing.
- Quizzes/examinations designed to assess students' ability to recall, critically analyze and apply key concepts and course content.
- Participation and regular attendance as required by instructor to ensure progress in mastering the course content and participation in collaborative learning projects.
- Final examination designed to assess students' mastery of the essential concepts explored in the course.

SAMPLE ASSIGNMENTS

Outside-of-Class Reading Assignments

- Students will be assigned several chapter readings from the textbook.
- Students may be assigned short research assignments relating to subject matter.
- Students may be assigned brief, one to two page, research assignments of a historical nature relating to course subject.

Outside-of-Class Writing Assignments

- Students will answer assigned chapter questions.
- Students may answer test questions in sentence or essay format.
- Students may be assigned short one to two page reports dealing with topics related subject matter.

Other Outside-of-Class Assignments

- Students will answer assigned chapter questions from assigned chapter readings.
- Students may be asked to conduct an interview of an industry professional which will include a write-up summary of the interview.
- One to two page research assignments.

COURSE MATERIALS

All materials used in this course will be periodically reviewed to ensure that they are appropriate for college level instruction. Possible texts include:

Alred, Gerald J., Brusaw, Charles T., and Oliu, Walter E. . The Handbook of Technical Writing. 9 ed. any: Bedford/St. Martin's Press, 2008.

Gerson, Sharon and Gerson, Steven. Technical Writing: Process and Product. 6 ed. any: Prentice-Hall, 2007.

Pringle, Alan S., O'Keefe, Sarah S. . Technical Writing 101: A Real-World Guide to Planning and Writing Technical Documentation. 2 ed. any: Scriptorium Publishing Services, Inc., 2003.

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