Description

Scientific and Technical Writing focuses on the development and application of rhetorical strategies used in writing about science and technology, including the importance for writers to stay current in their fields. Students analyze writing situations in the professional engineering, technology, and science workplaces and develop strategies for addressing audiences, organizing information, using appropriate style, and presenting the work using effective document design for both technical and non-technical readers. Introduction to the major theories, issues and contributors in the field of technical and scientific communication is emphasized. Starting with rhetorical analyses of audiences and progressing through deliverables, students learn to problem solve through a variety of communication projects in chosen scientific/technical communication fields. A key component of the course is writing about science and technology for a contemporary, general audience. Students analyze and produce writing designed to make even "hard" science and technology accessible.

Prerequisite(s)

ENG101 English Composition or equivalent

Outcomes

Upon completion of this course, students will be able to:

1. Demonstrate the unique qualities of scientific and technical writing style, including sentence correctness, conciseness, readability, clarity, organization, objectivity, and coherence.
2. Apply rhetorical strategies and formal elements of specific genres of technical and scientific writing to design documents for a general audience.
3. Locate, analyze, and report theory and library research that reflects standards of data interpretation for professional and general audiences.
4. Revise and edit technical and professional documents to prepare them for final publication in and out of the workplace.
5. Deliver clear oral and written communication that informs, persuades, and/or engages the audience.
6. Demonstrate appropriate composing and revision strategies based on collaboration with stakeholders.

Deliverables

Click here to view the 8 week Term Schedules.
Click here to view the 15 week Term Schedules.

Course Schedule

Weeks start on Monday, 12:01 AM ET (Eastern Time) and end on Sunday, 11:59 PM ET, US (United States).

Unless otherwise noted, all assigned items are due at the end of the module (by 11:59PM, Sunday).
<table>
<thead>
<tr>
<th>Week</th>
<th>Module &amp; Title</th>
<th>Reading</th>
<th>Assignments</th>
<th>Online Discussions</th>
<th>Course Outcomes Related to this Module</th>
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</thead>
<tbody>
<tr>
<td>Week</td>
<td>Module</td>
<td>Technical Documents:</td>
<td>Resource</td>
<td>Reference</td>
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<td>Turak, A. (2013). How to write a plan or proposal that rocks. <em>Forbes</em>.</td>
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### Evaluation

**Grade Ranges**

- **A=90-100%**
- **B=80-89%**
- **C=70-79%**
D=60-69%
F=below 60%

Breakdown

Grade Weights

<table>
<thead>
<tr>
<th>Grade</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Discussion Board</td>
<td>25%</td>
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<tr>
<td>Rhetorical Analysis</td>
<td>5%</td>
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<tr>
<td>White Paper (blog post)</td>
<td>10%</td>
</tr>
<tr>
<td>Proposal</td>
<td>10%</td>
</tr>
<tr>
<td>Abstract</td>
<td>5%</td>
</tr>
<tr>
<td>Team Project (using a Web 2.0 tool)</td>
<td>10%</td>
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<tr>
<td>Instructions</td>
<td>10%</td>
</tr>
<tr>
<td>Portfolio of Revised Work</td>
<td>25%</td>
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<tr>
<td>TOTAL</td>
<td>100%</td>
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</tbody>
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The grade breakdown

Criteria

COURSE REQUIREMENTS

Course Activities

M2A1: Rhetorical Analysis - 5%
Students will locate and analyze a piece of technical communication that relates to their own fields of study. The goal of this assignment is to determine whether the document was effective for its intended purpose, audience, and context based on the use of rhetorical appeals. Students will also evaluate such elements as clarity, conciseness, accessibility, and professionalism in their analyses.

M3A1: White Paper (blog post) - 10%
In this assignment, students will write a brief, informal white paper in the form of a blog post that persuades a reader to take action on a problem or controversy within their fields of study. The white paper will demonstrate that a problem exists, what has been done to correct the problem in the past, and how to solve the problem moving forward.

M4A1: Proposal - 10%
Using one of several instructor-provided scenarios, students will plan and write a short, persuasive proposal by combining a persuasive writing style with technical specifications to convince a decision maker to choose the student's company for a project. The proposal will include a description of the current situation, a brief project plan, the costs for the project, the benefits of completing the project, and the risks of not moving forward.

M5A1: Abstract - 5%
Students will create an abstract that can serve as a pitch for a scientific or technical article for publication. The goal of this assignment is to convince a publication editor to choose the pitch, so the writer can develop an article. The abstract must be clear, concise, comprehensive, and persuasive.

M6A1: Collaborative Conference Presentation (using a Web 2.0 tool) - 10%
In this assignment, students will collaborate in teams to produce a visually appealing presentation using a Web 2.0 tool other
than PowerPoint. The goal of this assignment is to create a collaborative presentation for a scientific or technical conference. Students will choose the subject matter as a team, an option for which is to choose a topic from the M4A1 Proposals or M5A1 Abstracts they submitted.

M7A1: Instructions - 10%
Students will write a set of instructions using one of several instructor-provided scenarios. The instructions include visual elements or explanation of visual elements to augment the text. The goal of this assignment is to write clear and concise steps that can easily be followed by a novice.

M8A1: Portfolio of Revised Work - 25%
In this assignment, students will revise several of their submitted works for the term based on the instructor’s feedback and submit them as a final project portfolio. The goal of this assignment is to practice applying feedback that simulates what writers would encounter if they were working as a technical writer. Though students are not required to apply all revision suggestions, they should think critically, apply what they have learned during this course, and make the changes that will best enhance the effectiveness of their work.

Discussions - 25%
Some discussion topics may require you to post your initial post prior to being able to view your classmates' posts.

In each module, students participate in one or two discussions. Discussions in total account for 25% of the final grade and are graded according to the Discussion Rubric.

Discussion contribution notes:
Responses to the discussion questions should relate to the assigned readings for that module and should not consist solely of personal opinion. Discussion forums open each Monday. Your original posts are due by 11:55 p.m. ET (Eastern Time) on Thursday. Responses to original posts are due by 11:55 p.m. ET on Sunday, before the forum closes. Students must respond to at least two original posts in each discussion forum unless otherwise directed.

In addition, students are required to read the responses to their original posts, and, if a classmate raises a question or an issue that warrants a response, students are required to respond.

When creating discussion posts, remember that, at a minimum, students should:
- Demonstrate a critical evaluation of the material
- Respond to the questions posed in the discussion forum
- Include references to the readings in support of the main argument
- Be original and thoughtful in response to the issue presented for discussion
- Use correct grammar, punctuation, and spelling
- Be responsive to questions or comments posted by others

Formatting and Style for Written Assignments:
Students should submit their assignments in APA (American Psychological Association) format unless otherwise specified in the assignment instructions.

Course Policies

School of Liberal Arts Late Policy:
- No exams or quizzes will be accepted after the due date.
- Discussion posts must be completed within the module where they appear. Late discussion posts will not receive credit. Instructors may impose additional due dates for initial posts or responses and assess late penalties accordingly.
- All graded assignments (e.g., projects, papers, homework, lab reports) submitted after the designated due date/time will be assessed a late penalty of five percent per day for the first 5 days (for example, -5 points each day on a 100 point assignment,
Institutional Policies

COURSE PARTICIPATION:

Weekly course participation is required. Please see the Student Participation Policy (https://info.excelsior.edu/student-policies/student-participation-policy-for-online-courses/) for more details.

Instructor Participation

Your instructor will:

- Post a welcome message during the first 24 hours of the course.
- Schedule real time office hours through the chat room and/or by individual appointment.
- Communicate with you through the Blackboard communication tools, including internal course messaging.
- Respond to student communications within two business days.
- Log into the course to review and participate at least three different days a week in 15-week courses, or four different days a week in 8-week courses.
- Provide you with formative feedback midway through the course based on work submitted to that point.
- Grade all formative assignments within 7 business days in 15-week courses and 4 business days in 8-week courses, and will grade final summative work within 5 business days after the end of the term.

POLICIES

You are responsible for being familiar with all the policies that are related to your activity in this course. Complete information on Excelsior College policies can be found in the Course Information area or by visiting the Excelsior College Policies page (http://www.excelsior.edu/policies).

All student work in this course may be submitted to plagiarism detection software. The reports from this software may be used as evidence in support of disciplinary actions. Please see the policy on Academic Honesty (https://info.excelsior.edu/student-policies/academic-honesty/) for more details.

Additional Items

This course contains the technologies listed below. Click each link to view each technology’s accessibility statement.

- Blackboard Learning Management System (http://info.excelsior.edu/accessibility/blackboard)

View more information about Disability Services.