Scientific Writing.

**Course Description**

Good writing and good social science go hand in hand, so this course stresses the relationship between clear, simple prose and thoughtful social analysis. By conducting original research, students learn to effectively use basic skills, such as sentence and paragraph construction, as well as advanced aspects of synthesis, style, data analysis, and report organization. We will examine various writing strategies appropriate for specific tasks and audiences in the discipline. Reviews of literature, field work, and quantitative research will be put into practice in workshops that emphasize the exchange of ideas and the process of planning, drafting, and revising original research.

**Outcomes**

* plan, draft, revise, and edit documents for use in the social sciences
* adapt writing to different audiences, purposes, and contexts
* synthesize and report on the professional literature in the social sciences
* write in a clear, coherent, and direct style appropriate for academic research
* understand and employ the various forms of scholarly writing, including the literature review, the research report, and field notes.
* avoid plagiarism

**Assessment Rubric**

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| --- | --- | --- |
|  | SATISFACTORY (Y) | UNSATISFACTORY (N) |
| CONTENT | Papers exhibit evidence of ideas that respond to the topic with complexity, critically evaluating and synthesizing sources, and provide an adequate discussion with basic understanding of sources. | Papers either include a central idea(s) that is unclear or off- topic or provide only minimal or inadequate discussion of ideas. Papers may also lack sufficient or appropriate sources. |
| ORGANIZATION AND COHERENCE | Documents and paragraphs exhibit identifiable structure for topics, including a clear thesis statement and topic sentences. | Documents and paragraphs lack clearly identifiable organization, may lack any coherent sense of logic in associating and organizing ideas, and may also lack transitions and coherence to guide the reader. |
| ARGUMENT AND SUPPORT | Documents use persuasive and confident presentation of ideas, strongly supported with evidence. At the weak end of the satisfactory range, documents may provide only generalized discussion of ideas or may provide adequate discussion but rely on weak support for arguments. | Documents make only weak generalizations, providing little or no support, as in summaries or narratives that fail to provide critical analysis. |
| STYLE | Documents use a writing style with word choice appropriate to the context, genre, and discipline. Sentences should display complexity and logical structure. | Documents rely on word usage that is inappropriate for the context, genre, or discipline. Sentences may be overly long or short with awkward construction. Documents may also use words incorrectly. |
| MECHANICS | Papers will feature correct or error-free presentation of ideas. At the weak end of the satisfactory range, papers may contain a few spelling, punctuation, or grammatical errors that remain unobtrusive and do not obscure the paper’s argument or points. | Papers contain so many mechanical or grammatical errors that they impede the reader’s understanding or severely undermine the writer’s credibility. |

**General Education Objectives**

This course confers General Education credit for Composition (C). Composition courses provide instruction in the methods and conventions of standard written English (i.e., grammar, punctuation, usage) and the techniques that produce effective texts. Composition courses are writing intensive, require multiple drafts submitted to your instructor for feedback before final submission and fulfill 6,000 of the university’s 24,000-word writing requirement. Course content should include multiple forms of effective writing, different writing styles, approaches and formats, and methods to adapt writing to different audiences, purposes and contexts. Students should learn to organize complex arguments in writing using thesis statements, claims and evidence, and to analyze writing for errors in logic.

In Professional Communication for Engineers, these objectives will be met in a variety of ways. Each major writing assignment, such as email, instructions, and the proposal, constitutes a particular form of writing that requires a different writing style, approach, and format. Especially important in all of the assignments is adapting our rhetoric to different audiences, purposes, and contexts. In some assignments, such as the proposal, students will be asked to define the primary readers on their own by developing an audience analysis. In other assignments, such as the definition, the audience and context will be defined by the assignment, and students will be assessed on how effectively they tailor the work to those readers. Several of the assignments, such as the proposal, require that students develop complex arguments, establishing a claim and providing effective evidence. The claim in the proposal assignment is that a proposed solution will be effective and feasible, and the evidence, drawn from industry and scholarly sources, proves that the solution will work; errors in logic will be ferreted out in peer review sessions. Other assignments, such as the research report, will emphasize clarity and conciseness, stylistic elements that are important in all professional communication.

**General Education Student Learning Outcomes**

**Content:** Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline.

**Communication:** Students communicate knowledge, ideas and reasoning clearly and effectively in written and oral forms appropriate to the discipline.

**Critical Thinking:** Students analyze information carefully and logically from multiple perspectives, using discipline-specific methods, and develop reasoned solutions to problems.

Student Learning Outcomes will be assessed in several ways. Content knowledge will be assessed primarily through quizzes on the reading materials, which include an exhaustive textbook on technical communication. The communication outcome will be assessed primarily through the major writing assignments, in which students are required to reason well and convey their knowledge and ideas clearly, as well as through collaborative activities both in-class and out-of-class. Critical thinking, a fundamental component of this course, will be assessed by measuring the degree to which papers effectively analyze information and develop reasonable solutions to problems in a manner appropriate to the discipline of engineering.

**Writing Requirement**

This course also confers 6000 words towards the Writing Requirement (WR), which ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning. While helping students meet the broad learning outcomes of content, communication, and critical thinking, the instructor will evaluate and provide feedback on students’ written assignments with respect to grammar, punctuation, clarity, coherence, and organization.

Course grades have two components. To receive Writing Requirement credit, a student must receive a grade of C or higher and a satisfactory completion of the writing component of the course.

**Course Policies and Procedures**

***Attendance and Participation***

Writing in the Social Sciences is a skills-based class. Because we develop skills by practicing, attendance and participation is vital--the more we write, the better writers we become. Consequently, frequent absences will affect students’ success in the course. Because writing skills are gained by experience, instruction is often based on in-class activities, which are difficult or impossible to replicate outside of class.

***Academic Honesty***

As a University of Florida student, your performance is governed by the UF Student Honor Code, (https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx). The Honor Code requires Florida students to neither give nor receive unauthorized aid in completing all assignments. Violations include cheating, plagiarism, bribery, and misrepresentation, all defined in detail at the above site.

**Schedule of Classes and Assignments**

This schedule is subject to change. The on-line syllabus and schedule supersede the paper copy. Unless otherwise indicated, assignments and readings are due the day they are listed on the syllabus, not the following day.

**Unit 1: The Rhetoric of Scientific Writing**

***Week 1***

* Introduction: Syllabus, Texts, Goals, and Course Organization.
* The Scientific Style. Chapter 1: "The Practice of Writing."
* The Scientific Method and the Organization of Research Papers. Chapter 4: "Papers Based on Original Research."

***Week 2***

* Ethnographies and Sociocultural Research Papers. Read "Analytic Ethnography."
* Quantitative Research Reports. Read “Children’s Perception of Corporal Punishment.”
* **Due: Research Paper Topic Proposal.** Research Methods and Sources. Assignment: Write an annotated bibliography for your research topic, emphasizing recent studies.

**Unit 2: Library Research and Research Methods**

***Week 3***

* How to Conduct Library Research.
* Field Trip: Library Scavenger Hunt.
* In-Class Research Workshop.

***Week 4***

* Discuss Library Research and Manuscript Form.
* **Due: Annotated Bibliography.** Introductions and the Synthesis of Literature.
* Discuss Exemplary Introductions in Quantitative Essays.

***Week 5***

* Discuss Exemplary Introductions in Qualitative Essays.
* Paragraphs and Coherence
* **Due: Introduction and Synthesis.** Punctuation Review.

***Week 6***

* Methods Section Overview.
* Quantitative Methods: Surveys and Research Instruments, Sampling and Statistical Analysis.
* Qualitative Methods: Participant Observation, Interview, Field notes.

***Week 7***

* Fieldtrip: Writing Ethnographic Field Notes.
* **Due: Field Notes**
* Guest Lecture.

**Unit 3: Graduate School Applications**

***Week 8***

* **Due: Methods and Survey or Research Instrument.** Graduate School Application: Process and Strategy.
* The Résumé.
* Personal Statements.

***Week 9***

* **Due: Application Materials (hard copy in class).**
* Individual Conferences.
* Individual Conferences.

**Unit 4: Results and Discussion**

***Week 10***

* **Due: Revised Application Materials.** Results Section Overview.
* Organizing and Presenting the Findings in Ethnographies and Socio-Cultural Research Papers.
* Use of Quotation in Findings.

***Week 11***

* Incorporation of Graphics into Research Papers.
* Discuss Exemplary Results.
* Peer Review of Results Sections.

***Week 12***

* **Due: Results.** Discussion Section Overview.
* Discussion Section Workshop.
* Discuss Exemplary Discussions and Conclusions. Conduct Discussion Section Peer Review outside of class.

**Unit 5: Professional Presentations**

***Week 13***

* **Due: Discussion.** Discuss Abstracts.
* Poster Presentations in the Social Sciences.
* Example Posters and the Presentation Flyer.

***Week 14***

* **Due: Research Paper.**Business Letters and Letters of Transmittal.
* Discuss Oral and Poster Presentations.
* Poster Presentations Practice and Review.

***Week 15***

* Poster Presentations Practice and Review.
* **Due: Poster Presentation Conference (Thursday, 6:15 pm-9:15 pm, Location TBA)**
* Discuss Presentations.