ENGL 334 Scientific and Technical Writing

Credit Hours: 3
Scheduled hours per week
Lecture: 3
Lab: 0
Other: n/a

Catalog Course Description: Upper-level course requiring the study of readings, practices, technical/scientific writing conventions: uses of graphics, professional vocabulary, audience analysis, research techniques, parameters and professional requirements for scientific or technical content and secondary research writing.

Pre-requisites: Grades of C or better in ENGL 101 or ENGL 107
Co-requisites: n/a

Course Learning Outcomes:

1. **Select appropriate topic and language for a specific writing assignment and/or audience.**
   - identification and selection of scientific or technical research topics;
   - analysis of scientific and technical audience levels, the student's current position as a member of a particular technical or scientific audience, the student's potential future audience levels, and concerns for writing for each level;
   - instruction in document design appropriate to various audience levels of professional or scientific writing;

2. **Provide adequate support for thesis and assertions.**

3. **Write with unity and coherence.**

4. **Write using correct grammar and punctuation.**

5. **Identify and choose traditional writing patterns appropriate for academic writing.**
   - identification and use of conventions such as graphics, headings, professional vocabulary, particular to technical and scientific writing;

6. **Evaluate own and others' writing.**
   - instruction in writing, proofreading, editing, and revising the student's research essay according to the conventions of professional and scientific writing identified in this list;

7. **Understand and internalize writing as a process.**
   - to empower students to write competently by teaching them grammar, mechanics, and the various dimensions and stages of the writing process;

8. **Be familiar with various forms of research, documentation, and their uses.**
   - research concerning the identification, location, and perusal of professional level technical or scientific material;
   - familiarization with and use of the conventions and formats of source documentation in secondary technical and scientific research.

Topics to be studied:

- Students will produce research papers combining the techniques introduced in this course and material that they will research concerning issues chosen by the students which, for those students enrolled in the MDS Degree Program, will integrate the students' minors.
- Students not in the MDS program should choose a focus that fits their career interests.
- At the beginning of the course, the instructor will establish formal criteria, as will the formats and parameters for writing assignments throughout the term.

Relationship of Course to Program or Discipline Learning Outcomes:

Student Learning Outcomes for Literature	
1. Students will identify the distinguishing elements of different genres.	
2. Students will identify and apply literary terms and definitions appropriately.	
3. Students will use the technique of close reading in the analysis of literature.	
4. Students will demonstrate an understanding of the creative process as it applies to literature.	
5. Students will demonstrate knowledge of different literary periods, their historical and social backgrounds, individual authors, stylistic trends, and influence on later authors and literary periods.	
6. Students will distinguish different theories and critical approaches related to the study of literature.	
7. Students will explore the contemporary relevance and value of past and present works.	
8. Students will examine the interdisciplinary nature of literature.	
9. Students will recognize the global nature of literature.	

Relationship of Course to General Education Learning Outcomes:	
Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	
Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	
Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
5/3/2016	

Special requirements of the course:

- This course will require secondary research concerning scientific and technical topics. Students will produce formal research papers with documentation based on the conventions of scientific and technical writing will be produced.
- Will meet the requirements of the Advanced Skill Set Certificate in Writing, the MDS writing minor, and the RBA future writing AOE.
- **(**indicate specific policies you have initiated for your class. (i.e. no cell phones, tardiness affecting grade, participation, etc.)

Additional information:

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