In this section of Technical and Scientific Writing we learn and practice how to write technical and scientific information for various readers.

This course will integrate a rhetorical and process approach to writing. We begin by surveying the work of technical and scientific writing – how to design and manage projects, how to navigate work environments, how to work with standards and templates, and other basic knowledge expectations for technical and scientific writers. We will then practice writing several genres including proposals, data visualizations, usability tests, research reviews, and reports with attention to their specialized and expert audiences and contexts.

Throughout the course we will explore how to shift our writing to accommodate the needs of our readers and the stakeholders in our work. This rhetorical point of view is the essential starting point for good technical and scientific writing in many fields. Between class, reading, online assessments, and practice work, 9 hours per week of dedication is expected.

**GENERAL COURSE DESCRIPTION**

3 credits. “The study of the rhetorical principles involved in technical and scientific workplace writing with an emphasis on the production of professional documents, such as analytical reports. Will not satisfy literature requirement; will not count toward an English major or minor (except for a minor in writing).” **Prerequisite Course(s):** ENGL 1301 and ENGL 1302; or ENGL 1303

**CREDIT HOUR JUSTIFICATION**
“The unit of credit is the semester hour, defined as one class meeting per week (or its equivalent) for one semester of 15 weeks. Most courses meet three hours per week and have a credit value of three semester hours. For each hour in class, at least two hours of preparation are expected on the part of the student. Many students should spend more than this amount of time studying.” – See full explanation in the Undergraduate Bulletin Registration page.

Official text from the catalog:

ENGL 2311 “Technical and Scientific Writing” (3 credits) typically meets three times each week in 50-minute segments or twice each week in 75-minute segments for 15 weeks, and also meets for a 2-hour final examination. In addition to weekly readings from the textbook and other relevant sources, students will create a variety of documents such as correspondence, portfolios, reports, instructions, and visual presentations. Other course requirements may include peer review exercises, online quizzes, and discussion boards. These activities average at a minimum 6 hours of work each week to prepare outside of the 3 classroom hours.

*Please keep in mind that, under federal financial aid eligibility requirements, SFA policy 5.4 defines the credit hour as “(1) Not less than one hour of classroom or direct faculty instruction and a minimum of two hours out-of-class student work each week for approximately fifteen weeks for one semester hour of credit, or the equivalent amount of work over a different amount of time, or (2) at least an equivalent amount of work as outlined in item 1 above for other academic activities as established by the institution including laboratory work, internships, practicum, studio work, and other academic work leading to the award of credit hours.” Online or hybrid courses should employ various strategies for creating student-professor contact and are held to the same standard for contact hours and out-of-class work as face-to-face classes.*

**GENERAL EDUCATION CORE CURRICULUM AND LEARNING OBJECTIVES**

This course has been selected to be part of Stephen F. Austin State University’s core curriculum. By enrolling in this course you are also enrolling in a Core Curriculum Course that fulfills the core objective components below.

“The core curriculum at Stephen F. Austin State University seeks to equip students with the broad intellectual foundations needed to live satisfying lives, to prepare themselves for advanced study, to contribute significantly to society and to succeed in a diverse global community. In the service of these objectives, the mission of the core curriculum is to develop students’ abilities to think in disciplined, critical, quantitative and creative
ways, and to communicate effectively.” – SFA Core Curriculum Mission Statement (2020)

The Texas Higher Education Coordinating Board has identified six objectives for all core courses: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives. Please see the SFA General Education Core Curriculum webpage in the SFA course catalog.

<table>
<thead>
<tr>
<th>Core Objective</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Critical Thinking Skills</td>
<td>To include creative thinking, innovation, inquiry, and analysis, evaluation, and synthesis of information.</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>To include effective development, interpretation, and expression of ideas through written, oral, and visual communication.</td>
</tr>
<tr>
<td>Teamwork</td>
<td>To include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.</td>
</tr>
<tr>
<td>Personal Responsibility</td>
<td>To include the ability to connect choices, actions, and consequences to ethical decision-making.</td>
</tr>
</tbody>
</table>

At the completion of this course, students will be able to:

- Understand the recursive writing and social editing process and be able to write a variety of technical documents in an acceptable level of Standard American English. (Communication Skills and Teamwork)

- Write a variety of technical documents, demonstrating their awareness of audience and facility in addressing different audiences and stakeholders in complex rhetorical situations. (Critical Thinking, Communication Skills, and Personal Responsibility)

- Write technical and workplace documents by applying the appropriate
categorical modes of rhetorical composition (descriptive, expositive, scientific, etc.), integrating visuals with text, and presenting information in an oral format. (Critical Thinking, Communication Skills, and Personal Responsibility)

• Work in groups to produce and critically evaluate documents, integrating different points of view. (Critical Thinking, Communication Skills, Teamwork, and Personal Responsibility)

• Use critical-thinking skills and exhibit technical proficiency in the invention and composing processes. (Critical Thinking and Communication Skills)

• Understand ethical considerations in technical and professional writing, understanding the consequences of communication acts. (Critical Thinking, Teamwork, and Personal Responsibility)

• Tailor communications to social and ethical frameworks, editing them to be effective and responsible in international and intercultural situations. (Critical Thinking, Communication Skills, and Personal Responsibility)

• Adequately research a topic and use documented evidence to support a paper written in the style applicable to their individual field of study. (Critical Thinking, Communication Skills, and Personal Responsibility)

**REQUIRED TEXTS**

Access to SFA websites and applications including Brightspace, the library, email, MySFA, etc.

**If the class is not held in a lab** – students must maintain access to readings posted on D2L through a personal laptop or handheld device or by printing out texts. There is a link on D2L to the book, but if you would like to purchase one for yourself, here is the information.

Writing Science in the Twenty-first Century by Christopher Thaiss
(Used ~ $30)

Required textbook. We will use the book starting the second week of class. So please acquire it as soon as possible!

**ACCOMMODATION INCLUDING MENTAL HEALTH AND WELLNESS**
To obtain disability-related accommodations, alternate formats, and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services promptly may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

**Student Wellness and Well-Being**

SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

**On-campus Resources:**

**The Dean of Students Office** (Rusk Building, 3rd floor lobby)
www.sfasu.edu/deanofstudents
936.468.7249
dos@sfasu.edu

**SFA Human Services Counseling Clinic** Human Services, Room 202
www.sfasu.edu/humanservices/139.asp
936.468.1041

**The Health and Wellness Hub** “The Hub”

Location: corner of E. College and Raguet St.

To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:

- Health Services
- Counseling Services
- Student Outreach and Support
- Food Pantry
- Wellness Coaching
- Alcohol and Other Drug Education

www.sfasu.edu/thehub
936.468.4008
Crisis Resources:
• Burke 24-hour crisis line: 1.800.392.8343
• National Suicide Crisis Prevention: 9-8-8
• Suicide Prevention Lifeline: 1.800.273.TALK (8255)
• Joh Crisis Text Line: Text HELLO to 741-741

BRIGHTSPACE COURSE WEBSITE

SFA uses Brightspace as its virtual course management system. You can locate our course website through your MySFA login.

Class handouts, reading links, assignment sheets, and important documents such as this syllabus will be posted on Brightspace in the content tab.

We will use the discussion board and other Brightspace features.

Assignments will be submitted electronically. Look in the assessments tab for submission folders.

Locate the site’s gradebook. You are in charge of checking the gradebook for errors throughout the semester.

You must check your email regularly!

ATTENDANCE AND LATE WORK

Technical and Scientific Writing is an attention-intensive class. If you miss class meetings or skip readings and Brightspace pages you will miss important information, group work, and practice tasks. If you get off schedule it is difficult to catch back up.

Ms. Galope assigns due dates to keep you on track in the class and to keep herself on schedule in grading. Due dates are part of a support structure for major projects and are only renegotiated in extreme cases. Do not expect timely grading and feedback on renegotiated submissions.

There is a team unit in our class. That grade is partially dependent on your communication and diligent contact with your team. Plan to communicate outside of
class regularly with your team during the team unit.

Please contact Ms. Galope in advance or as soon as possible after you have an extraordinary circumstance occur that affects your performance in this class. When in doubt, ask.

There are no extra penalties for missing class beyond the natural consequences of missing instruction and in-class assignments. However, these natural consequences add up quickly. Most students who miss class find they cannot pass the class with higher than a C after 4 absences (=2 weeks of class) and most students who miss 6 classes (=3 weeks of class) drop or fail.

**GRADES**

Grades will be computed in the following fashion:

<table>
<thead>
<tr>
<th>Coursework and Respective Points:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter Quizzes</td>
<td>15</td>
</tr>
<tr>
<td>Chapter Exercises</td>
<td>15</td>
</tr>
<tr>
<td>Ice Breaker</td>
<td>5</td>
</tr>
<tr>
<td>Email</td>
<td>5</td>
</tr>
<tr>
<td>Resume’</td>
<td>5</td>
</tr>
<tr>
<td>Letter of Introduction/Elevator Pitch</td>
<td>10</td>
</tr>
<tr>
<td>Instructions (Non-Verbal)</td>
<td>10</td>
</tr>
<tr>
<td>Instructions (Verbal)</td>
<td>10</td>
</tr>
<tr>
<td>Job Advertisement</td>
<td>5</td>
</tr>
<tr>
<td>Business Plan</td>
<td>20</td>
</tr>
</tbody>
</table>

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**TOTAL POINTS:** 100

Your running points/grades will be available on D2L (http://d2l.sfasu.edu); please advise me ASAP if you see anything that seems amiss. The final course grade will depend on the points earned.

Students will write a course capstone essay in which students will be asked to develop a professional document of no fewer than 500 words that exhibits an understanding of core objectives as determined by the core assessment schedule; students will be assessed based on their use of critical thinking skills; grammar, vocabulary, and written style and effectiveness; teamwork; or, the effect of personal choices.
More information on written assignments will be forthcoming. Essays will be graded both on substance (quality and accuracy of ideas) as well as expression (tone, style, syntax). Exams may include M/C, short answer, and essay formats.

**Grade Criteria:**

**Overall, your grade will be based on a total of 100 points.** As such, to figure your grade out at any point in the semester, simply add up the number of points that you have and divide that by the number of points possible. This will give you an overall percentage.

**Grading Standard:**

**A: 89.5 - 100 points:** Students earning the grade of an A on any assignment will have completed work that obviously demonstrates a more than average understanding of the course material and completion of all aspects and requirements of the assignment. The grade of an A is reserved for that work which expertly displays one’s ability to engage the ideas at hand, recognize and dialogue about the complications of such ideas, and translate such dialogue into clear, academic prose that is free of stigmatized errors.

**B: 79.5 - 89.4 points:** Students earning the grade of a B on any assignment will have completed work that demonstrates a more than average understanding of the course material and completion of all aspects and requirements of the assignment. The grade of a B is reserved for that work which adeptly displays one’s ability to engage the ideas at hand, recognize and dialogue about the complications of such ideas, and translate such dialogue into clear, academic prose that is free of stigmatized errors. However, the level of thought, while still above average, may fluctuate in terms of analytic abilities and expression.

**C: 69.5 - 79.4 points:** Students earning the grade of a C on any assignment will have completed work that demonstrates an average understanding of the course material and completion of all aspects and requirements of the assignment. The grade of a C is reserved for that work which displays one’s ability to engage the ideas at hand (more so through summary and response rather than analysis), recognize and dialogue about the complications of such ideas (however, the complications recognized will focus more on surface-level issues rather than the greater whole), and translate such dialogue into clear, academic prose that is free of stigmatized errors. As can be seen from this description, the level of thought will be acceptable and display that a student has read the assignment, but his/her analytic abilities and level of expression will not be nearly as complicated nor developed. Instead, C work will display a student’s hold to traditional methods of expression (simpler construction of sentence and paragraph development) and a struggle to develop complex, critical thinking skills.
**D: 59.5 - 69.4 points:** Students earning the grade of a D on any assignment will have completed work that demonstrates a below-average understanding of course material and a lack of completion of all aspects and requirements of the assignment. The grade of a D is reserved for that work which displays one’s struggle or refusal to engage the ideas at hand, simply summarizes the work understudy with no actual recognition of or dialogue about the complications of such ideas, and the translation of ideas into writing is completed in such a convoluted manner that the audience will have difficulty following the conversation.

**F: 0 - 59.4 points:** Students earning the grade of an F on any assignment will either not have completed the assignment, will have completed the assignment but not followed the guidelines, or will have completed the assignment and demonstrated a complete misunderstanding of the course material. In this case, it will be obvious that the student has either not completed the required reading and/or given him/herself enough time to develop the work. The grade of an F is reserved for that work which does not engage the issues at hand, offers a base (not complete) summary of the work at hand with no critical engagement, and the translation of ideas into writing is either incomplete or the audience will be unable to follow the conversation. It is important to remember that a student can receive 0 out of 100 points. In the case that a student only partially completes an assignment or completes a work (in terms of page length, but not purpose) s/he may receive 0 points.

**ACADEMIC HONESTY**

Work for any course should be newly generated by you or your assigned team for each assignment.

Plagiarism involves using another's work, words, or ideas without correctly giving credit to the author. It is just as serious to plagiarize the work of another student as it is to plagiarize the work of a published author.

Use a standard documentation style to credit your source. If you have questions about correct documentation, please ask!

In a collaborative class such as this, you may not always fully understand what is and is not plagiarism or what type of collaboration outside of class is and is not allowed. If you have questions, please ask!

We will be discussing how to use generative AI productively in this course. In this course, you will be submitting all of your process work – including your chats with generative AI. Please keep in mind that you should always ask if you want to use generative AI in any course.
General Policy

The Code of Student Conduct and Academic Integrity outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.

Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expressions or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.

WITHHELD GRADES

Ordinarily, at the discretion of the instructor of record (Dr. Parks) and with the
approval of the academic chair/director (Dr. Tasker), a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Note: often students who request a withheld grade do not end up passing. Therefore, it is very difficult for you to obtain permission. Please avoid this option if possible. https://www.sfasu.edu/policies/course-grades-5.5.pdf

OTHER UNIVERSITY POLICIES APPLY

See the SFA Policy Manual and the General Bulletin for other university-wide policies and explanations.

GENERAL SCHEDULE

Please refer to the Brightspace for a full schedule. This is just the required outline. This course generally follows a schedule where Mondays begin the new week.

Week 1 - Writing to Reach Readers

Week 2 - Building Experience and Confidence

Week 3 - “Writing” Redefined

Week 4 - Writing Ethically

Week 5 - Writing the Research Article: Abstract, Introduction

Week 6 - Writing the Research Article: Results and Discussion

Week 7 - TBD

Week 8 - Research Review

Week 9 - STEM Journalism
Week 10 - Science Blogs

Week 11 - Creating Posters and Infographics

Week 12 - Oral-Visual Presentations

Week 14 - Editing

Week 15 - Finals

Week 16 - TBD

Unit Lesson Plans