Communication
1. This request is submitted by (department name): Chemical Engineering

2. Course prefix and number: CHEN 301

3. Texas Common Course Number: 

4. Complete course title: Engineering Workplace Writing

5. Semester credit hours: 3

6. This request is for consideration in the following Foundational Component Area:
   - [x] Communication
   - [ ] Mathematics
   - [ ] Life and Physical Sciences
   - [ ] Language, Philosophy and Culture
   - [ ] Creative Arts
   - [ ] American History
   - [ ] Government/Political Science
   - [ ] Social and Behavioral Sciences

7. This course should also be considered for International and Cultural Diversity (ICD) designation:
   - [ ] Yes
   - [x] No

8. How frequently will the class be offered? fall and spring semesters

9. Number of class sections per semester: 3

10. Number of students per semester: 50-75

11. Historic annual enrollment for the last three years: 80, 1st time taught 86 120

This completed form must be attached to a course syllabus that sufficiently and specifically details the appropriate core objectives through multiple lectures, outside activities, assignments, etc. Representative from department submitting request should be in attendance when considered by the Core Curriculum Council.

13. Submitted by: 
   
   Elizabeth Johnson
   Course Instructor
   Approvals: J. N. KAAS
   Date 2/21/2013

14. Department Head
   
   K. K. KAAS
   Date 2/21/2013

15. College Dean/Designee
   
   Date 2/21/2013

For additional information regarding core curriculum, visit the Texas Higher Education Coordinating Board website at www.thecb.state.tx.us/corecurriculum2014

See form instructions for submission/approval process.
Texas A&M University

Core Curriculum

Initial Request for a Course Addition to the Fall 2014 Core Curriculum

Foundational Component Area: Communication

In the box below, describe how this course meets the Foundational Component Area description for Communication. Courses in this category focus on developing ideas and expressing them clearly, considering the effect of the message, fostering understanding, and building the skills needed to communicate persuasively. Courses involve the command of oral, aural, written, and visual literacy skills that enable people to exchange messages appropriate to the subject, occasion, and audience.

How does the proposed course specifically address the Foundational Component Area definition above?

Chen 301. Processes for preparing documents commonly developed by employees, technical and non-technical, working in an engineering-focused workplace: database research; ethics and personal responsibility; teamwork problem-solving; planning, drafting, revising, and editing reports, proposals, correspondence, instructions, procedures, and oral presentations. Chen 301 focuses on writing as it is developed and used in an engineering workplace context, rather than in an academic or classroom setting.

Course Goals and Learning Outcomes

The course has six goals/learning outcomes for students:

• Understand differences between writing in school and writing at work.
• Understand the process of designing reports, procedures, correspondence, visuals, and business presentations for changing readers and work contexts.
• Demonstrate knowledge of engineering database access; apply this knowledge to research-based engineering reports targeting current engineering issues.
• Write a variety of engineering-focused documents exemplifying workplace issues. Develop each according to the writing process.
• Discuss a variety of cases during class, answer a list of rhetorical questions during class, and complete a written rhetorical analysis of each case.
• Apply principles of document design to enhance readability of documents.
• Apply principles of effective graphics and clear, concise, correct style.

Measuring These Outcomes

Students will write a variety of reports, memoranda, letters, and procedures based on scenarios that will change with each assignment. These will be evaluated according to the grading standards which appear at the end of this syllabus.

These six goals/outcomes link to the following THECB core curriculum communication requirements. Communication courses require the components beginning with *. These goals are compatible with ABET requirements.

Core Objectives

Describe how the proposed course develops the required core objectives below by indicating how each learning objective will be addressed, what specific strategies will be used for each objective and how student learning of each objective will be evaluated.

Critical Thinking (to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information):
Texas A&M University
Core Curriculum

Initial Request for a Course Addition to the Fall 2014 Core Curriculum

*Critical thinking:* Every assignment will require one or more written workplace documents that respond to a case situation. Students will have to choose content and style that will achieve the goals of the work situation and the needs of readers in the work situation. These choices will come from careful rhetorical analysis of the case, its readers, purposes, and context. All cases will require students to select format and page design to encourage readers to access the message easily and accurately.

Communication (to include effective development, interpretation and expression of ideas through written, oral and visual communication):

**Visual Literacy:** Students will learn and apply effective, correct design of memoranda, letters, basic visuals, and formal/informal reports; and procedures. Students will also learn how to design workplace documents to maximize readability (visual appeal) and memorability to ensure the document's effectiveness with readers.

**Oral Literacy:** Students will be assigned to read FuelFix.com for the semester and be prepared to give a two-minute Think On Your Feet summary of a topic from this website which has critical information of importance to chemical engineers.

Teamwork (to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal):

**Team Work:** Since every assignment will emanate from case scenarios, students will discuss these cases in class to help them understand the assignments and the organizational dynamics present in the case situation presented. They will complete a written rhetorical analysis, a list of questions, that will guide them in content development, choice of style, and supporting visuals as they write the case response. Several assignments will require database research and the need to critically analyze what they find and to determine its relevance to the case response. Students will see, in preparing written responses to case analysis, the importance of rhetorical principles in creating effective workplace documents.

Personal Responsibility (to include the ability to connect choices, actions and consequences to ethical decision-making):

**Personal Responsibility:** Students will be expected to follow the Aggie Code of Honor and the Ethical Code of the Society for Technical Communication, located on the course website: to write only what is truthful to the best of the knowledge of the writer.

**Social [Professional] Responsibility:** Students will practice responding with memoranda, letters, and short reports, to ethical issues, via ethics cases, drawn from nspe.org cases (National Society of Professional Engineers), to show their ability to deal with difficult professional engineering issues, documenting required actions within the understanding their responses will carry legal liability for them and for the engineering organization for which they work. In chemical engineering, personal ethics merge with social/professional ethics.

Please be aware that instructors should be prepared to submit samples/examples of student work as part of the future course recertification process.
CHEN 301. 503: Engineering Workplace Writing

Elizabeth Tebeaux
206 Brown
Office hours: TBA

Class: 112 Brown
10:20-11:10 MWF

Course Description

Chen 301. Processes for preparing documents commonly developed by employees, technical and non-technical, working in an engineering-focused workplace; database research; ethics and personal responsibility; teamwork problem-solving; planning, drafting, revising, and editing reports, proposals, correspondence, instructions, procedures, and oral presentations.

The course focuses on writing as it is developed and used in a workplace context, rather than in an academic or classroom setting.

Course Goals and Learning Outcomes

The course has six goals/learning outcomes for students:

- Understand differences between writing in school and writing at work.
- Understand the process of designing reports, procedures, correspondence, visuals, and business presentations for changing readers and work contexts.
- Demonstrate knowledge of engineering database access; apply this knowledge to research-based engineering reports targeting current engineering issues.
- Write a variety of engineering-focused documents exemplifying workplace issues. Develop each according to the writing process.
- Apply principles of document design to enhance readability of documents.
- Apply principles of effective graphics and clear, concise, correct style.

Measuring These Outcomes

Students will write a variety of reports, memoranda, letters, and procedures based on scenarios that will change with each assignment. These will be evaluated according to the grading standards which appear at the end of this syllabus.

These six goals/outcomes link to the following THECB core curriculum communication requirements. Communication courses require the components beginning with *.

THECB Requirements for Core Curriculum Communication Courses

Courses in this category focus on developing ideas and expressing them clearly, considering the effect of the message, fostering understanding, and building the skills needed to maximize the potential for effecting change through communication.
*Communication Skills* - effective development, interpretation and expression of ideas through written, oral, listening, and visual communication

- **Critical thinking:** Every assignment will require one or more written workplace documents that respond to a case situation. Students will have to choose content and style that will achieve the goals of the work situation and the needs of readers in the work situation. All cases will require students to select format and page design to encourage readers to access the message easily and accurately.

- **Visual Literacy:** Students will learn and apply effective, correct design of memoranda, letters, basic visuals, and formal/informal reports; and procedures. Students will also learn how to design workplace documents to maximize readability (visual appeal) and memorability to ensure the document's effectiveness with readers.

- **Personal Responsibility:** Students will be expected to follow the Aggie Code of Honor and the Ethical Code of the Society for Technical Communication, located on the course website: to write only what is truthful to the best of the knowledge of the writer. STC ethical principles: legality, honesty, quality, fairness, and professionalism.

- **Social [Professional] Responsibility:** Students will practice responding with memoranda, letters, and short reports, to ethical issues, via ethics cases, drawn from nspe.org cases (National Society of Professional Engineers) and other professional ethical statements, to show their ability to deal with difficult professional issues, documenting required actions with the understanding their responses will carry legal liability for them and for the technical organization for which they work. **In many workplaces, personal ethics merge with social/professional ethics.**

- **Team Work:** Since every assignment will emanate from case scenarios, students will discuss these cases in class to help them understand the assignments and the organizational dynamics present in the case situation presented. Several assignments will require database research and the need to critically analyze what they find and to determine its relevance to the case response. Students will see, in preparing written responses to case analysis, the importance of rhetorical principles in creating effective workplace documents.

**Texts**
- Ancillary readings available on the course website: [http://research.cse.tamu.edu/groups/tebeaux/](http://research.cse.tamu.edu/groups/tebeaux/)

**Evaluation**

Each assignment will have specific objectives that will follow the assignment. The assignment will be evaluated in terms of those objectives. All assignments will be posted on the course website. Assignment objectives will reflect course objectives. Grading standards are included at the end of the syllabus.
Expectations

- You must submit all assignments to pass the course.
- Assignments should be submitted on time, unless you make other arrangements with me. I am not obligated to take late work without prior notification. Assignments submitted late without your notifying me will not be accepted or penalized 10 points for each day the assignment is late.
- Due dates on other assignments will allow you sufficient preparation time to prepare each assignment.
- Each assignment must be prepared according to instructions. Assignments that do not meet the requirements will not be accepted and will receive a grade of zero.
- You are expected to read all material assigned.
- You are expected to attend class. Both class and reading assignments prepare you to complete assignments. I will take role at the beginning of each class.
- If you have to miss class, you are responsible for what is covered, even if you have an excused absence.
- Every assignment will require revision, the method by which your writing improves. You may be required to produce multiple revisions.

Assignments – Subject to change, depending on needs of the class

10%  Audience Analysis—two summaries prepared for two different audiences.

10%  Two letters/memoranda based on ethics scenarios

60%  Three reports based on work-based case scenarios based on current issues in the workplace.

20%  Technical instructions/procedures

**Note: One report will require a PowerPoint presentation, which will prepare you for job interviews in which you have to discuss an engineering concept.

We will discuss resumes/CVs and letters of application for job applications and for graduate school admissions, but these will not be graded. I will focus design methods that will encourage readers to want to read what you have submitted.

Assignments

All assignments will be based on current engineering case situations. Exact due dates on the week specified will be determined by class progress on each topic.
1. Case 1: Writing summaries for two different audiences

Chapter 8—Reports and Oral Presentations


Chapter 4—Style. Writing clearly, concisely, and effectively. The grammar of clarity.


Chapter 5, Chapter 6—Designing Text and Graphics

4. Case 4—Visuals and page design, Due week 7

Chapter 3—Ethics—General and NSPE

5. Case 5—Memo 1, Due week 9

Chapter 11—Oral Presentations; design for effectiveness speaking and use of visuals

6. Case 6—report 3+ PowerPoint, Due week 11

7. Case 6—Memo 2, Due week 13

Chapter 10—Instructions:

8. Instructions/Procedures Assignment, Due week 14

Honor Code

All honor code violations will be reported immediately to the honor code office. Plagiarism will not be tolerated. You will be expected to document your use of the work of others in all assignments.

Academic Integrity

For additional information please visit: http://aggiehonor.tamu.edu. An Aggie does not lie, cheat, or steal, or tolerate those who do.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students
with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.

**Grading Standards for CHEN 301: Engineering Workplace Writing**

**Grading Standards—English 301: Technical Writing**

Each assignment will be evaluated according to the following criteria. Please note that these criteria reflect the important issues discussed in your text and in class. Also note that definite differences exist between what is excellent, good, average, and unacceptable. Any deficient work (D paper) will be considered unacceptable.

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**Note:** Noticeable errors in mechanics--spelling, Standard English usage, and sentence structure--will automatically result in a grade of F. Business organizations believe that surface errors discredit the integrity of the organization: incorrect use of English does not suggest that the technical quality of work is reliable.

Excessive errors in any category can lower any grade significantly.

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**The A Paper**

The A paper should exhibit these qualities:

Defines audience(s) and purpose(s) specifically and correctly, as specified by the assignment.

Determines organization, format, content, and style suitable for the specified audience(s) and purpose(s). In short,

- Content fits audience and purpose.
- Format reveals content and organization of content; enhances the visual effect.
- Readability of the document is suited to audience/reader(s)' context.
- Document fulfills the assignment.

Uses graphics effectively.

Looks thoroughly professional--neat, exemplifies excellent word processing.

Contains no major errors in English usage--subject-verb agreement, dangling modifiers, comma splices, sentence fragments, pronoun references.

Contains very few typos, and these should be unobtrusive.

The A paper is **excellent**.

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**The B Paper**
The B paper does the above items less consistently than the A paper.

- Usually has more mechanical errors than the A paper, but these are not excessive—that is, to suggest that the writer has literacy problems.

- Format may not be as effective—headings not worded accurately; lack of headings; method of partitioning material could be more effective.

- Audience(s) and purpose(s) usually clearly defined, but overall presentation—i.e., content—not as correct or effective.

- Graphics are usually effective.

- Looks professional and neat.

- The B paper is good but not excellent—contains more errors than the A paper. Excessive errors in any one category can reduce the A paper to a B paper.

The C Paper

The C paper usually has errors in several of the above categories or a major error in one.

The C paper is average. It contains too many errors to be considered a good paper. That is, the errors are noticeable and reduce the effectiveness of the paper.

The D Paper

The D paper exemplifies extensive errors in nearly all categories. The D paper is nearly an F paper. In a course like this one, deficient (D) writing, in the workplace, will likely have the same affect on the employee as the F paper. Both are unacceptable.

The F Paper

The F paper has errors in all categories or a series of errors in one category. For example,

- Excessive errors in mechanics. Reading the paper, you visualize a writer who is functionally illiterate. The paper has numerous errors in punctuation, spelling, sentence structure, and usage.

- Lack of format. The paper obviously needs a format and page design plan that reveals the content and the organization. For example, a report that contains no headings or document design strategies (producing dense, undifferentiated text) would be
unacceptable.

- Content is not suited to the audience and purpose--faulty or incomplete choice of ideas, or choice of style and diction. In short, "says the wrong things in the wrong way."

- Lacks graphics, if the content clearly indicates that graphics are needed. Or, the graphics are incorrectly designed.

- Document is messy. (Students have no excuse for any assignment being messy in a university where students pay a computing fee and have access to high quality word processing, graphics and design software.)

- The F paper is unacceptable because it violates the principles of effective document design on which technical writing is based.