

CHBE 333 – Chemical Engineering Seminar

Department of Chemical and Biomolecular Engineering
University of Maryland
Fall 2019

COURSE INFORMATION

- Prerequisites:** Junior standing in CHBE and permission of the department
- Class Meetings:** Section 0103: Wednesday, 11-11:50 am, AJC 2119,
Section 0101: Wednesday, 12-12:50 pm, AJC 2119,
- Credit Level:** 1 credit
- Instructor:** Dr. Deborah S. Goldberg
Office: ChE 1223D
Email: dsgold@umd.edu
Phone: 301-405-5575
Website: <https://dsgoldberg.weebly.com/>
Office Hours: By appointment
- Course Material:** No textbook required. Handouts will be posted to course website as needed.
- Course Description:** (From Testudo) To develop oral communication skills through a series of in class presentations on current chemical engineering topics.

OBJECTIVES & PERFORMANCE CRITERIA

Learning Objectives

1. To develop professional oral and written communication skills by preparing reports on recent developments in chemical engineering.
2. To become familiar and work with the major sources of chemical engineering information and data.
3. To understand the value of planning, the importance of safety and the role of ethical issues in the design, development and operation of the chemical process industries.

Performance Criteria

1. Students will demonstrate that they can develop clear, organized PowerPoint slides and present material confidently to an audience of peers. Students will demonstrate that they can write a concise, effective technical summary that is grammatically correct with appropriate tone, content and length.
2. Students will demonstrate that they can find, read, understand, synthesize and cite major sources of chemical engineering information and data.
3. Students will demonstrate that they can create a detailed plan to execute a project and understand safety risks of chemical manufacturing processes.

COURSE FUNDAMENTALS

Course website

The course website is on ELMS: <https://myelms.umd.edu/login> . The course website will be used for posting course material, announcements, and grades. Ensure the email address you have associated with ELMS is current, as course information will be communicated through the ELMS messaging system.

If you are having difficulty with ELMS/Canvas, do not contact the instructor for technical support. The University has professional 24-hour support for students: 1-877-399 -4090

Classroom Environment

Students are expected to contribute to a classroom environment that is safe space for students to practice and improve upon oral presentation skills. As such, please observe the following during class:

- Interact with all instructors and classmates in a respectful and professional manner. Behaviors and remarks perceived to constitute teasing or harassment will not be tolerated.
- Questions and comments on student presentations should be reserved for the end of the presentation so as not to disrupt the flow. Questions should be genuine, inquisitive and discussion-provoking, not designed to intentionally expose weaknesses or embarrass fellow classmates.
- Use of electronic devices is not permitted except for times and purposes specifically designated by the instructor. Using electronic devices during class time is distracting and disrespectful to students who are presenting. Please leave the classroom if you need a device (in emergencies only).

Attendance

Regular attendance and class participation is expected and part of your grade (see "Evaluation" for more details). University- excused absences will be accepted. **All planned absences due to religious observances, athletic/ university commitments, etc. must be communicated to the instructor in writing prior to the end of schedule adjustment period (September 10, 2018).** The presentation schedule will be set at the beginning of the semester to avoid conflicts with these known absences.

Interviews and engineering conferences will also be accommodated as excused absences. Students should inform the instructor of the interview or conference as soon as it is scheduled so that the presentation schedule can be adjusted if necessary. The student should provide written documentation to substantiate the absence.

If a student must miss a group or individual presentation due to an unplanned excused absence, the student must contact the instructor to make alternate arrangements to complete a makeup presentation. If a student misses a presentation due to an unexcused absence, they will receive a grade of "0" for that assignment. A self-signed sick note is only acceptable on class days that a student is not presenting. Students are responsible for all information presented in class for an excused or unexcused absence.

Teams

Teams will be assigned by the instructor using the CATME team tool and will be used for all team presentations and projects. Team contributions will be assessed through a survey after each major presentation or project. If there is a concern about a team member not contributing equally to the team projects, this should be brought to the attention of the instructor in a timely manner so that appropriate feedback can be given and the issue corrected.

Topic Selection

Topic selection for individual and team projects is expected to be unique amongst all CHBE333 sections taught by a single instructor. Topic selection for the individual “tech talk” presentations and team presentations on “chemical process safety” must be approved by the instructor (see dates on course schedule for topic proposal submission).

Presentation Attire

Since this class is intended to prepare you for a professional environment, you are expected to dress appropriately on the days you present. While you don't have to “dress up” (jeans are fine), gym clothes, pajamas, visible undergarments, exposed midriff, etc. are not appropriate. Your physical appearance affects perceived credibility in a professional context, and this is an excellent opportunity to start practicing.

<http://www.businessinsider.com/how-your-clothing-impacts-your-success-2014-8>

<http://www.businessinsider.com/how-to-dress-for-work-business-attire-2014-8>

Communication with the Instructor:

Email is the best way to reach the instructor outside of office hours. A reply to email can be expected within two business days. Email should be used to notify the instructor of planned and/or excused absences, questions on assignment requirements, team issues, etc. Any questions regarding grading or student progress should be addressed in person.

Oral Presentation Format

Students are expected to use PowerPoint or google slides for oral presentations. If you would like to use google slides, you must submit a PDF or PPT copy of your presentation to ELMS along with the link in the comments section.

Arrangements for Students with Disabilities:

The University is legally obligated to provide appropriate accommodations for students with disabilities. Please contact Disability Support Service (DSS) Office (301) 314 – 7682 or Dissup@umd.edu or visit their website: <http://www.counseling.umd.edu/DSS/>

If you have an accommodation letter from DSS indicating that you have a disability which requires academic accommodations, please present it to the instructor by the end of the schedule adjustment period (September 10, 2018) so we can discuss the accommodations that you might need in this class.

University Closures or Delays

If class is affected by a University closure or delay, the instructor will email the class concerning the impact to the missed class meeting and will distribute an updated course schedule.

Copyright Statement

All materials presented or provided in class and on the course website (e.g., lectures, handouts, videos, slides) are copyright protected. Students may not copy, record, or distribute these materials without the instructor’s permission.

EVALUATION

Grading Policy

There will be a total of 1000 points from during the semester. Each item will contribute to your final grade as follows:

Attendance and Engagement:	200 points
Individual Assignments:	450 points
Team Assignments:	350 points
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TOTAL	1000 POINTS

Grading Scale

This course will use a +/- grading system with letter grades equivalent to the following point values: 895-1000 points (90-100%): A-/A/A+; 795-894 points (80-89%): B-/B/B+; 695-794 point (70-79%): C-/C/C+; 595-694 points (60-69%): D-/D/D+; <595 points (<60%) = F.

Attendance and Engagement (200 points)

Because of the interactive and participatory nature of this class, attendance is required. Students are expected to come to class on time (within 5 minutes of the start time) and will be asked to sign in. Arrival between 5 minutes and 25 minutes after the start of class will be considered late. Late arrival will be excused two times during the semester after which students will lose attendance points for tardiness. If a student arrives more than 25 minutes late for an unexcused reason, this will be counted as an absence. Each absence will result in a deduction of 5 points from the class participation grade (total 70 points). See excused absence policy regarding proper communication about and documentation for excused absences. In addition to attendance, students will be asked to complete reflections (4 @ 25 points each) and team surveys through CATME (3 @ 10 points).

Individual Assignments (450 points)

There will be five individual assignments. Details will be posted to the course website.

1. Technical Slide Design (50 points)
2. Personal Pitch (Oral Presentation) (100 points)
3. Technical Topic in Chemical Engineering (Abstract & Oral Presentation) (200 points)
4. Mock interview (50 points)
5. Project planning (50 points)

Team Assignments (350 points)

There will be five team activities during the semester. Details will be posted to the course website.

1. Team contract (20 points)
2. Technical Slide Design (80 points)
3. Chemical Process Safety Presentation (150 points)
4. Planning Project (100 points)

Team Contribution

Team contribution will be assessed for each major group presentation or project. Students will take a survey through CATME after each presentation to assess their contributions as well as the contributions of their team members. If team a member does not contribute sufficiently to the team presentation, his or her grade for that team assignment will be reduced according to the CATME score.

If there are concerns about a team member’s level of contribution, this should be brought to the attention of the instructor so that it can be addressed in a timely fashion. In addition, the instructor reserves the right to deduct points if a team member is unprepared. In *rare* cases where students are either not contributing at all to the team assignment or are actively sabotaging the team presentation, the instructor reserves the right to further reduce the grade, or in extreme cases award no credit for the project or presentation.

Assignment Submission & Late Policies

<u>Assignment Type</u>	<u>Submission</u>	<u>Time Due</u>	<u>Late Policy</u>
Oral Presentations, preparation for in class activities	ELMS	9 am on Wednesday	Accepted up until class time (10% penalty)
CATME surveys, reflection assignments, topic proposals	ELMS/ CATME	Midnight on the due date	Accepted up to 1 day late (50% penalty)

Assignments are still due at the specified time in the case of planned excused absences or unexcused absences. Assignments should be turned in as soon as practical after an excused, but unplanned absence (email instructor for more information).

COURSE POLICIES

This course will adhere to university policies relevant to Undergraduate Courses are found here:

<http://ugst.umd.edu/courserelatedpolicies.html>

Topics that are addressed in these various policies include academic integrity, student and instructor conduct, accessibility and accommodations, attendance and excused absences, grades and appeals, copyright and intellectual property. In addition, links to full policies on excused absences and academic dishonesty can be found below. Students are expected to read and understand these policies.

Excused Absence Policy:

<http://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/V-1.00G.pdf>

Academic Dishonesty Policy:

<http://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/III-100A.pdf>

A Special Note on Plagiarism

During this course students will be asked to read primary sources and communicate and synthesize information based on these sources. **All original sources must be properly cited.** Details will be provided on proper citation format. In addition, students are expected to paraphrase content in their own words. Blatant plagiarism will result in automatic submission to the honor council.

COURSE SCHEDULE- TENTATIVE

This schedule will be confirmed including dates for individual and team presentations by September 11th. The finalized schedule will be posted on the course website. **You are responsible for referencing the finalized schedule each week to ensure you are prepared for the assignment that is due.**

Week	Date	Class plan	Presentation/ Assignment Due by 9 am	Assignment due by Midnight	CATME Survey Due
1	8/28/2019	Lecture: Course Introduction, Careers in Chemical Engineering, Appropriate Citation			
2	9/4/2019	Lecture: Making effective technical presentations		Reflection 1	Team maker by 9/10
3	9/11/2019	Team contracts/ Technical slide in class activity in teams	Individual technical slides	TT Topic Proposal	
4	9/18/2019	Lecture: Interview Skills & Networking		Team technical slides, team contract	
5	9/25/2019	Personal Pitch Presentations	Personal Pitch Pre-Work		
6	10/2/2019	Ethics discussion 1	Ethics pre-work		
7	10/9/2019	Lecture: Chemical Process Safety		Ethics reflection 1	
8	10/16/2019	Tech talk 1	Tech talk abstract & slides		
9	10/23/2019	Ethics discussion 2	Ethics pre-work		
10	10/30/2019	Chemical Process Safety Presentations	CPS presentations	Ethics reflection 2	CPS eval by 11/6
11	11/6/2019	Project Planning Lecture		Mock interview	
12	11/13/2019	Tech talk 2	Tech talk abstract & slides		
	11/20/2019	Planning activity	Planning activity pre-work		
13	11/27/2019	No class-Thanksgiving break			
14	12/4/2019	Tech talk 3	Tech talk abstract & slides		
15	12/11/2019	Finals week, no class		Reflection 2, Team PP Submission	PP Eval by 12/15

TT: Technical Topic in Chemical Engineering CPS: Chemical Process Safety PP: Project planning
