ChE119: Current Events in Chemical Engineering

Instructors:  
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Prof. David Gay  
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PSBN, 4623C  
Eng II, 1502

Schedule:  
Thurs, 5:30-7:00 pm  
Eng II, #1519 & #3301

Course website:  
http://www.engr.ucsb.edu/~david.gay/che119/
Introduction

- **Course Objectives**
  - Develop oral and written communication skills
  - Increase awareness of current events and developments in chemical engineering fields, industry, education, government, and society

- **Organization**
  - **Weeks 1 & 5:** Presentations by Faculty
    → Oral Presentations (David Gay)
    → Technical Writing (Songi Han)
    → CV/Resume/Interviewing (David Gay)
  - **Weeks 2-4 & 6-8:** Student Group Presentations + Essays
  - **Week 9:** Practice Interviewing
Course format (I)

• 4-person groups – group formation will be announced by Oct 1

• 2 group oral presentations + 2 group essays in different topics:
  • Ethics, safety and accident prevention (A)
  • Energy, catalysis, and sustainability (B)
  • Bioengineering, biomedical, or biotechnology (C)

• 1 individual business letter + 1 individual curriculum vitae (resume)

• You choose the articles (with faculty approval by Oct 4), from
  • Chemical & Engineering News (C&EN), AIChE Journal, Chem Eng Progress
  • Nature journals (Nature, Nature Materials, Nature Biotechnology, etc.)
  • Science
  • U.S. Chemical Safety Board

• 2 class periods for discussions on job interviewing, applying for internships and practice interviewing
Course format (II)

• **Oral Presentations**
  • 16 min + 4 min questions/comments
  • 15-20 min talk evaluation by class and faculty
  • All group members participate
  • Professional attire! → no shorts, flip-flops, or tee-shirts
  • Everyone in the class must attend all oral presentations, participate in class discussions, and fill out evaluation forms

• **Written Essays**
  • One report per group
  • 5 paragraph limit
  • < 2 pages, single-spaced
  • Each team member discusses their contribution (a few sentences) on a summary page turned in with the report
Course format (III)

• Prepare Job Application Package
  • Identify job opportunity (from current or old job advertisement, fellowship or internship opportunity, or present a viable “cold call” scenario)
  • Write a job application cover letter, suitable for the job opportunity
  • Put together a resume geared towards the job opportunity
  • Mock up job interviews will be practiced on Dec 6. Each student will represent the interviewer and the interviewee by taking turns

• Grading
  • All assignments will receive a letter grade for feedback
  • Total letter grade will be converted to P/F at the end
# REVISEd Fall 2012 ChE 119 Assignment Schedule REVISEd

*Thursdays 5:30-7:30pm  *  *Eng II 1519 & 3301*

*Professors Songi Han and David Gay*

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**Topics**

A  Ethics & Safety  
B  Energy & Environment  
C  Biotechnology & Biochemical Engineering

All scientific articles for oral and written presentations must be approved by faculty  
Please email the proposed paper to both faculty for approval

songi@chem.ucsb.edu  
david.gay@ich.ucsb.edu

**Oral Talk Format**

4-person groups: 16 min oral presentation + 4 min for questions  
5-person group: 20 min oral presentation + 5 min for questions  
15-20 min of class and faculty feedback on presentation and slides will follow each presentation