

Professional Seminar
ECH 4934 Section TEST
Class Periods: Wednesday, Period 8 (3:00 pm – 3:50 pm)
Location: Zoom meetings (Online class)
Academic Term: Fall 2020

Instructor: Dr. Fernando Mérida

- e-mail: fmerida@ufl.edu
- Zoom Office hours: Mon, 11:00 am– 12:00pm

Co-Instructor: Dr. LiLu Tian Funkenbusch

- e-mail: lilu.funkenbusch@ufl.edu
- Office hours: M 9am-12pm. (Shared w/ other classes. See Canvas for Zoom link.)

Contacting Us:

- E-mail is the preferred communication platform. Please make sure the subject line of your e-mail has the label “ECH 4934 – Question”. Please expect a response within 36 hours (M-F) and within 48 hours (weekend). We both teach multiple classes, so properly labelling your email will speed up response times.
- Normally, we have an “open door” policy where you can stop by any time that we are in our offices. This semester, however, physical meetings will not be taking place. You can still arrange Zoom meetings outside of regularly scheduled office hours, please just email one or both of us to set up a time.
- Announcements will be periodically posted on Canvas, be sure to have your notifications turned on.

Course Description

(1 credit) Discussion of issues associated with development of professional careers in Chemical Engineering. Topics include career pathways for Chemical Engineers, communication skills in the professional environment, and resources for a successful career path within an ethical environment.

Course Pre-Requisites / Co-Requisites: None

Required Textbooks and Software

No textbook. Additional materials and literature elements will be provided.

Special Notes for Fall 2020

- All lectures will be recorded and posted to the Canvas page. These lectures may be used for future semesters. Please be aware of this if you choose to show your video or speak during classes.
- Covid-19 is an obvious factor in the attendance policy, and we can make arrangements if you are ill. However, since this class has been moved entirely online, it is expected that Covid-19 will not have a significant impact on the course.
- Attendance will be monitored via Zoom. Be sure to set your name in Zoom to the one listed in the roster to avoid confusion and being penalized for an absence.

Course Objectives and Outcomes

1. Identify the main career pathways for undergraduate students of Chemical Engineering
2. Identify the types of industries with high prospective career opportunities for Chemical Engineers highlighting those with potential for internships, Co-ops, and full-time opportunities.
3. Identify Graduate School programs (i.e. Master and Doctorate) and other post-graduate professional opportunities, and learn basic elements of application process, school selection, and specialization areas.
4. Plan a successful attendance to the UF Career showcase by identifying/using the available resources of the UF Career Connection Center.
5. Improve relevant communication skills in the professional environment.
 - 5.1 Preparation/improvement of professional documents such as Resume, Curriculum Vitae, Cover Letters, and LinkedIn profile.
 - 5.2 Practice of mock interview, elevator pitch, and oral presentations.
6. Identify other resources for successful career paths such as student/professional associations and memberships
7. Identify strategies to overcome challenges in various career pathways by learning from real-life experiences.
8. Identify the process of ethical decision-making based upon professional ethical codes and the role of underrepresented minorities in professional career pathways.
9. Prepare oral presentations based upon a contemporary issue in Chemical Engineering.

Professional Component (ABET):

This course contributes 1 credit hour toward meeting the minimum 48 credit hours of Engineering Topics required in the basic-level curriculum for the Bachelor of Science Degree in Chemical Engineering.

Relation to Program Outcomes (ABET):

Outcome	Coverage
1. An ability to identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	
3. An ability to communicate effectively with a range of audiences	✓
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	✓
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	

Course Schedule

The complete schedule is shown in the table below. Adjustments to the schedule may be required; if that is the case, students will be informed via Canvas announcements.

WEEK	DATE	TOPIC
1*	Sept. 2	Orientation meeting and course overview
2	Sept. 9	Career Connections Center (Erin Lin)
3	Sept. 16	Career Pathways: Industry
4	Sept. 23	No Class: Career Showcase (Attendance Required)
5	Sept. 30	Career Pathways: Graduate / Professional School
6	Oct. 7	Graduate School Panel
7	Oct. 14	Industry Speaker (Michael Fowler, Air Liquide)
8	Oct. 21	Industry Speaker (PepsiCo R&D Team)
9	Oct. 28	Industry Speaker (Nicolas Munoz, Dow)
10	Nov. 4	Public Speaking for Engineers (Diana Nagy, Dial Center for Written and Oral Communication)
11	Nov. 11	No Class: Veteran's Day
12	Nov. 18	Ethics Discussion
13	Nov. 25	No Class: Thanksgiving
14	Dec. 2	Diversity and Inclusion (Dr. Sindia Rivera-Jimenez)
15*	Dec. 9	Best of presentations

* Attendance to these classes is strictly mandatory. See below for additional details.

Homework Assignments

- Details for each assignment will be provided in Canvas and discussed in class.
- All assignments described below are individual except for some parts of the project.
- Submission will be via Canvas. For group assignments, only one member needs to upload the assignment.
- All assignments must be submitted by the deadline stated in Canvas for full credit. Canvas will lock submissions at 11:59pm on the due date. The only exceptions are for excused absences consistent with the University policy (see below). The instructors must be informed no later than 48 hours after the deadline of the missing assignment or the assignment will not be accepted, even if the absence was excused.
- All students are responsible for ensuring that Canvas submission was successful. You can confirm this by clicking “refresh” after any submission. No late submissions via e-mail will be allowed.

[X] - #	DUE DATE	TITLE AND DESCRIPTION
QUIZ-1	Sept. 8	<u>Syllabus Quiz</u> Take a quiz to make sure you read the syllabus. Quiz will be available via Canvas and must be taken before the due date, not on the due date.
HW-1	Sept. 15	<u>Resume Lab</u> Create or update a copy (one page) of your resume. These will be reviewed by your instructors and a small group of your peers.
HW-2	Sept. 29	<u>Attendance to Career Showcase</u> Submit a screenshot of your virtual attendance at the Career Showcase.
HW-3	Sept. 29	<u>Industry Pathways</u> Choose one company that hires chemical engineers and interests you. Include the name, logo, a brief description of company operations, a description of three main products or services produced by the company, the justification why a Chemical Engineer would be a good fit, and up to 3 available opportunities for Chemical Engineers on the company's career website.
HW-4	Oct. 6	<u>Graduate School Pathways</u> List three graduate programs of your interest (PhD, Master, or professional schools such as Medicine, Law, etc.). Each option must have a brief description of the program including University, city/state, and reasons for choosing that program/University. For PhD programs, include potential research areas and advisor.
HW-5	Oct. 13	<u>Professional Development Reflection - introduction</u> Prepare a one-page Professional Development Reflection addressing the following: <ul style="list-style-type: none"> • Your professional skills, personal skills, strengths, and weak points • Your plans after graduation • Where you see yourself 5 years after your graduation • Your ideal job and reasons why • A job you do NOT see yourself doing and reasons why
QUIZ-2	Oct. 20	<u>Speaker Quiz #1: Michael Fowler</u>
QUIZ-3	Oct. 27	<u>Speaker Quiz #2: PepsiCo</u>
QUIZ-4	Nov. 3	<u>Speaker Quiz #3: Dow</u>
QUIZ-5	Nov. 10	<u>Speaker Quiz #4: Diane Nagy</u>
HW-6	Dec. 1	<u>Ethics and additional resources</u> Read the three assigned ethical codes (AICHE , ACS , NSPE). Prepare a comparison table on similarities, differences, and additional comments. There will be an in-class discussion of an ethical dilemma.
HW-7	Dec. 1	<u>Student Organizations</u> Choose three student professional organizations . For each option, provide a brief description, website and/or social media link, and contact information of the president. If you are already a member of any of these organizations, please provide a proof of your registration and/or involvement.
HW-8	Dec. 8	<u>Professional Development Reflection - Revision & Conclusions</u> Review your Professional Development Reflection. Comment on what has changed from your original reflection and the reasons for these changes/improvements/additional challenges, etc. Use the original file and do not delete the original text; just make text additions with a different color font to distinguish your updated reflection from that made earlier in the semester.

Presentation Project

- The table below provides an overview of the project. Specific details will be provided in Canvas and discussed in class.
- The first and last phases of the project will be individual. The second and third stages will be group assignments. Your groups will be assigned the last week of September or first week of October, based on your topic choices for phase I.
- No late submissions will be allowed unless there is a justifiable reason. (See above)

PHASE	DUE DATE	PROJECT PHASE DESCRIPTION
I	Sept. 16	<u>Phase I: Topic Choice</u> Choose 3 topics from the list provided, or you may choose your own with instructor approval, and write a short outline for each. Specifics will vary based on topic, but an example would be to introduce global climate change, narrow in with an introduction to a specific alternative energy source (such as solar), then outline different types or forms of that energy source (i.e. solar water heater, photovoltaic panels, etc.), then end with a discussion of the pros and cons of the technology
II	Oct. 21	<u>Phase II: Presentation Draft</u> Your group should put together a draft presentation by combining ideas from Phase I. A PowerPoint file should be submitted (one per group). Phase III will involve a talk ~ 15-minute long so you should plan to have each group member speak for roughly 3 minutes.
III	Nov. 18	<u>Phase III: Oral presentations and submission of video files and evaluation forms</u> Record yourself and your groupmates giving the presentation. Upload this file to MediaSite or another file sharing site. Make sure we (the instructors) can easily access this, be sure that the permissions are set appropriately. Upload a link to this video file in Canvas as your submission.
IV	Dec. 2	<u>Phase IV: Peer evaluations</u> Fill out an evaluation of yourself and your groupmates for the presentation project.

Career Development Events, Seminars, and attendance to student associations meeting

- Throughout the semester, attendance to 3 different activities is required: a) career development events, b) seminars, and c) student association meeting. These activities will be **outside of class time** and they can be online..
- Some of these activities will be announced via Canvas, but every student is responsible for identifying these activities based on his/her own interest. Links to Career Connections Center and UF Student Activities & Involvement are provided below
 - *Career Connections Center:* <https://career.ufl.edu/>
 - *Student Activities & Involvement:* <https://studentinvolvement.ufl.edu/>
- For each activity you will prepare a summary with information such as date and title of the activity, name of the speaker, association, or sponsoring entity and affiliations, brief description of the contents of the talk/meeting, and benefit for the professional goals of the student.
- Seminars or career event talks offered during the class time will not count toward the five talks required for this assignment.
- This assignment will be available for submission after Thanksgiving (week of Dec. 2).
- **This assignment is mandatory. Failure to complete this assignment will result in failing letter of grade for this course.**

Attendance Policy, Class Expectations, and Make-Up Policy

- Class attendance is mandatory. Up to three unexcused absences will be allowed; a failing grade in the class will occur if a student has four or more unexcused absences.
- Class attendance accounts for most of the participation grade (see evaluation of grades)
- The first and last day of class have a strictly mandatory policy unless there is a justifiable reason to support and excused absence. Students missing these classes will contact course instructors as soon as possible.
- Excused absences must be consistent with university policies in the undergraduate catalog (<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>) and require appropriate documentation.

Evaluation of Grades

ASSIGNMENT	% FINAL GRADE
HOMEWORKS (8)	40%
QUIZZES (5)	15%
PRESENTATION PROJECT (3)	25%
CAREER EVENTS/SEMINARS*	10%
PARTICIPATION[^]	10%
TOTAL GRADE	100%

*Failure to complete this assignment will result in failing grade for this course.

[^]Participation grade will be a combination of assessment done by course instructors on student attendance and active participation in class including peer evaluations.

Grading Policy

PERCENT	GRADE	GPA
93.4 - 100	A	4.00
90.0 - 93.3	A-	3.67
86.7 - 89.9	B+	3.33
83.4 - 86.6	B	3.00
80.0 - 83.3	B-	2.67
76.7 - 79.9	C+	2.33
73.4 - 76.6	C	2.00
70.0 - 73.3	C-	1.67
66.7 - 69.9	D+	1.33
63.4 - 66.6	D	1.00
60.0 - 63.3	D-	0.67
0 - 59.9	E	0.00

More information on UF grading policy may be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.ua.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.ua.ufl.edu/public-results/>.

University Honesty Policy

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Commitment to a Safe and Inclusive Learning Environment

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Graduate Program Coordinator
- Robin Bielling, Director of Human Resources, 352-392-0903, rbielling@eng.ufl.edu
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, taylor@eng.ufl.edu
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, nishida@eng.ufl.edu

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <https://registrar.ufl.edu/ferpa.html>

Campus Resources:

Health and Wellness

U Matter, We Care:

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Discrimination, Harassment, Assault, or Violence

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the [Office of Title IX Compliance](#), located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, title-ix@ufl.edu

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or <http://www.police.ufl.edu/>.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.
<https://lss.at.ufl.edu/help.shtml>.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. <https://www.crc.ufl.edu/>.

Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.
<https://teachingcenter.ufl.edu/>.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.
<https://writing.ufl.edu/writing-studio/>.

Student Complaints Campus: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.

On-Line Students Complaints: <http://www.distance.ufl.edu/student-complaint-process>.