Professional Seminar
ECH 4934   Section 1G67
Class Periods: Tuesday, period 7 (1:55 pm – 2:45 pm)
Location: Larsen Hall 0330
Academic Term: Spring 2020

Instructor: *Dr. Fernando Mérida*	**Co-Instructor:** *Dr. LiLu Tian Funkenbusch*
• e-mail: fmerida@ufl.edu	• e-mail: lilu.funkenbusch@ufl.edu
• Office: CHE 217	• Office: CHE 219
• Office hours: Wed, 3:00 – 3:50 pm	• Office hours: Wed, 3:00 – 3:50 pm

Contacting both Dr. Mérida and Dr. Funkenbusch:
- 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).
- Course instructors have an open-door policy during office hours, so feel free to come in. Meeting outside office hours can be made by appointment via e-mail.
- When you come in, please first say your name (e.g. *Good afternoon, I am Daenerys Targaryen from the Seminar Class).*
- Announcements will be periodically posted on Canvas.

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

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	

Required Textbooks and Software
No textbook. Additional materials and literature elements will be provided.

Course Schedule
The complete schedule is shown in the table below. Adjustments to the schedule may be required thus this table will be updated and students will be informed via Canvas announcements.

Week	Date	Topic
1	**01/07**[*]	**Orientation meeting and course overview.**
2	01/14	Resume crash course and basic preparation for Career Showcase
2.1	*01/15*	*Invited speaker: Optimizing your attendance to the Career Showcase*
3	01/21	Students will attend the Career Showcase (no class)
4	01/28	Career pathways in Chemical Engineering: Industry
5	02-04	Invited speaker: Successful alumni in Industry
6	02-11	Career pathways in Chemical Engineering: Graduate and Professional School
7	02-18	Panel on Graduate School by ChemE Junior Faculty and current graduate students
8	02-25	Invited speaker: Graduate School Application Strategies
9	03-03	Spring Break (no class)
10	03-10	Invited speaker: Industrial pathways for Chemical Engineers with a PhD degree
11	03-17	Additional UF resources (professional societies, institutes, specialized centers, academies, etc.)
12	03-24	Invited speaker: Patent Law for Chemical Engineers
13	03-31	The role of ethics in professional pathways for Chemical Engineers
14	04/07	Invited speaker: Public Speaking for Engineers
15	04/14	Invited speaker: The role of diversity and inclusion: diversifying professional pathways
16	**04/21**[*]	**Best of presentations**

[*] Attendance to these classes is strictly mandatory. See the section "Make-up policy" for additional details.

Homework

a) Assignments

- Specific details for the preparation of the different assignments will be provided in Canvas and discussed in class.
- All assignments are individual assignments as described in the table below, except by HW-2. However, some of the individual assignments will involve group discussions. This will be described under Assignments in Canvas and will also be discussed in class.
- Homework submission will be made via Canvas. For group assignments, only one member will upload the assignment file.

- All assignments must be submitted by the deadline stated in Canvas for full credit. Late submissions will involve a 20% grade deduction/day thereafter. Maximum deduction is 60%; is the assignment is submitted more than three days from the original deadline then the grade will be zero.
- All students are responsible to confirm that submission of assignment elements (i.e. files, text entries, etc.) were successful. You can confirm this by clicking "refresh" after any submission. No late submissions via e-mail will be allowed.

HW - #	Due date	Title and description
HW-1	01/13	**Resume Lab** Create or update a copy (one page) of your resume. Bring a hard copy for next class and a color pen for peer review.
HW-2	01/13	**Group contact information & meeting time (Group assignment)** Fill the Contact Information form available in Canvas with the required information and the signatures for each member of the group.
HW-3	01/27	**Attendance to Career Showcase** Submit a picture of a business card from any of the interviewers/company representatives present during the career showcase.
HW-4	02/03	**Industry Pathways** Choose one company of your interest. Include the name, logo, brief description of company operations, three main products or services along with their description, the justification why a Chemical Engineer would be a good fit, and up to 3 available opportunities for Chemical Engineers (if any) in the company's career website.
HW-5	02/10	**Professional Development Reflection – introduction** Prepare a one-page Professional Development Reflection addressing the following: List your professional skills, personal skills, strengths, and weak points. Include your plans after graduation, how do you see yourself 5 years after your graduation, your ideal job and reasons, and the job in which you do NOT see yourself, and reasons.
HW-6	04/20	**Professional Development Reflection – Revision & Conclusions** 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.
HW-7	TBD	**Ethics and additional resources** a) Read the three assigned ethical codes* (see links at the end of this table). Prepare a comparison table on similarities, differences, and additional comments. There will be a in-class discussion of an ethical dilemma. b) Choose three student professional organizations Foreach 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	TBD	**Graduate School Pathways** 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.

* Ethical codes: AIChE: http://www.aiche.org/about/code-ethics; ACS: http://www.acs.org/content/acs/en/careers/career-services/ethics.html; NSPE: http://www.nspe.org/resources/ethics/code-ethics

b) *Presentation Project*

- Specific details for the Presentation Project and its different phases will be provided in Canvas and discussed in class.
- All the phases of the project are individual as described in the table below. However, phase III will require meeting with your group for ~ 2.5 hours at some point during the semester. More details will be provided in the corresponding assignment folder in Canvas.
- No late submissions will be allowed unless there is a justifiable reason.

Phase	Due date	Project phase description
I	03/16	**Phase I: Presentation Outline** Choose a contemporary issue topic related to Chemical Engineering and prepare an outline (200 - 300 hundred words) including the title of your presentation and a short justification for choosing that topic.
II	03/30	**Phase II: Presentation Draft** Submit a draft for your presentation following the guidelines provided in the corresponding assignment in Canvas.
III	04/13	**Phase III: Oral presentations and submission of video files and evaluation forms** Upload the link of the video file of the presentation you delivered to your team members along with the evaluation sheet. Based on the scores you assigned to your team members, you will select the winner of your group.

c) *Career Development Events and Seminars*

- Throughout the semester, attendance to different career development events and seminars **outside the class time** is required (5 in total).
- Some of these events will be announced via Canvas, but every student must be responsible to identify these events/seminars based on his/her own interest.
- For each event/seminar you will prepare a summary indicating information such as date and title of the event/seminar, name of the speaker or sponsoring entity and affiliations, brief description of the contents of the talk, and benefit for the professional goals of the student.
- More details and examples of typical events/seminars will be provided in Canvas.
- 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 from 02/03/2020 – 04/22/2020

Attendance Policy, Class Expectations, and Make-Up Policy
- Class attendance is mandatory. Up to three unexcused absences will be allowed; failure in the class will occur if a student has more than four unexcused absences.
- Class attendance accounts for most of the participation grade (see evaluation of grades)
- Class 1 and Class 16 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.

- The use of cell phone in class is not allowed unless it is for purposes of the class. The student will be allowed to take/make emergency calls upon authorization of course instructors.
- The use of tablets and/or laptops may be required for some classes. This will be announced beforehand.

Evaluation of Grades

Assignment	% Final Grade
Assignments (8)	50%
Presentation project (3)	25%
Career Events/Seminars	15%
Participation*	10%
Total Grade	100%

* The class participation grade will be a combination of assessment done by course instructors on student attendance and active participation in class.

Grading Policy

Percent	Grade	Grade points
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.aa.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.aa.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.