

## Professional Seminar

ECH 4934

**Class Periods:** Monday, Period 9 (4:05 pm – 4:55 pm)

**Location:** NEB 0202

**Academic Term:** SP 22

**Instructor:** Dr. Sumant Patankar

- e-mail: [spatankar@ufl.edu](mailto:spatankar@ufl.edu)
- Office hours: M 2:00 pm – 3:00 pm CHE223 ([zoom link](#)). Please wear a mask if you plan to attend in person.
- You can call me Prof./Dr. Sumant, or “Fernando” if you feel comfortable doing so.

### **Contacting Me:**

- 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). I teach multiple classes, so properly labelling your email will speed up response times.
- 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 2021**

- All lectures may be recorded. These lectures may be used for this or 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. You must follow the UF Screen, Test, and Protect protocols, however, and present the relevant documentation.

### **Course Objectives**

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.

**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	

\*Coverage is given as high, medium, or low. An empty box indicates that this outcome is not covered or assessed in the course.

### **Course Schedule**

The 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.

<b>Week</b>	<b>Date</b>	<b>Topic</b>
<b>1</b>	Jan 10	Course Intro & Syllabus Overview
<b>2</b>	Jan 17	<b><u>No class : MLK day</u></b>
<b>3</b>	Jan 24	Career Pathways: Industry
<b>4</b>	Jan 31	<b>Guest Lecture</b>
<b>5</b>	Feb 7	<b>Guest Lecture</b>
<b>6</b>	Feb 14	<b>Guest Lecture</b>
<b>7</b>	Feb 21	Career Pathways: Graduate/Professional School
<b>8</b>	Feb 28	<b>Guest Lecture: Panel on Graduate School</b>
<b>9</b>	March 7	<b><u>No Class - Spring Break</u></b>
<b>10</b>	March 14	Engineering Ethics
<b>11</b>	March 21	Elements of Oral Presentations
<b>12</b>	March 28	<b>Guest Lecture</b>
<b>13</b>	April 4	<b>Guest Lecture</b>
<b>14</b>	April 11	<b>Guest Lecture</b>
<b>15</b>	April 18	<b><u>Final Presentations</u></b>

*Highlighted = Still scheduling w/ speakers*

### **Attendance Policy, Class Expectations, and Make-Up Policy**

- Class attendance is mandatory.
  - Students are given one “free” unexcused absence with no grade penalty.
  - A second unexcused absence will result in a 5% deduction of the final grade.
  - A third unexcused absence will result in an additional 10% deduction of the final grade. (15% overall)
  - Anything past three unexcused absences will result in automatic failure of the course.
- Class attendance accounts for most of the participation grade (see “Evaluation of Grades”)
- 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**

<b>ASSIGNMENT</b>	<b>% FINAL GRADE</b>
<b>HOMEWORKS (10)</b>	50%
<b>PRESENTATION PROJECT (3)</b>	30%
<b>CAREER EVENTS/SEMINARS*</b>	10%
<b>PARTICIPATION/ATTENDANCE^</b>	10%
<b>TOTAL GRADE</b>	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**

<b>Percent</b>	<b>Grade</b>	<b>Grade Points</b>
94.0 – 100.0	A	4.00
90.0 – 93.9	A-	3.67
87.0 – 89.9	B+	3.33
84.0 – 86.9	B	3.00
80.0 – 83.9	B-	2.67
77.0 – 79.9	C+	2.33
74.0 – 76.9	C	2.00
70.0 – 73.9	C-	1.67
67.0 – 69.9	D+	1.33
64.0 – 66.9	D	1.00
60.0 – 63.9	D-	0.67
0.0 – 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>

## 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.

	<b>DUE DATE</b>	<b>TITLE AND DESCRIPTION</b>
<b>HW-01</b>	Jan 24	<b><u>Syllabus Quiz</u></b> Take a quiz to make sure you read the syllabus. Quiz will be available via Canvas and must be taken <b>before</b> the due date, not on the due date.
<b>HW-02</b>	Jan 24	<b><u>Professional Development Reflection – introduction</u></b> Prepare a one-page Professional Development Reflection addressing the following: <ul style="list-style-type: none"><li>• Your professional skills, personal skills, strengths, and weak points</li><li>• Your plans after graduation</li><li>• Where you see yourself 5 years after your graduation</li><li>• Your ideal job and reasons why</li><li>• A job you do NOT see yourself doing and reasons why</li></ul>
<b>HW-03</b>	Jan 31	<b><u>Industry Pathways</u></b> 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.
<b>HW-04</b>	Feb 7	<b><u>Resume</u></b> Create or update a copy (one page) of your resume. These will be reviewed by your instructors, who will give feedback in Canvas comments.
<b>HW-05</b>	Feb 14	<b><u>Student Organizations</u></b> Choose three <u>student professional organizations</u> . 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.
<b>HW-06</b>	March 14	<b><u>Graduate School Pathways</u></b> 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.
<b>HW-07</b>	March 21	<b><u>Ethics</u></b> Read the three assigned ethical codes ( <u>AICHE</u> , <u>ACS</u> , <u>NSPE</u> ). Prepare a comparison table on similarities, differences, and additional comments. There will be an in-class discussion of an ethical dilemma.
<b>HW-08</b>	April 11	<b><u>Professional Development Reflection – Revision &amp; Conclusions</u></b> 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 peer evaluation assignment will be individual.
- Your groups of 5 will be assigned via CATME shortly after Phase I is due.
- No late submissions will be allowed unless there is a justifiable reason. (See above)

<b>PHASE</b>	<b>DUE DATE</b>	<b>PROJECT PHASE DESCRIPTION</b>
<b>I</b>	Jan 24	<b><u>Phase I: CATME Team-Maker Survey</u></b> Take a survey to be sorted into teams for the presentation project.
<b>II</b>	Feb 7	<b><u>Phase II: Topic Choice</u></b> Your group should choose 3 topics from the list provided in Canvas, or you may create 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
<b>III</b>	March 7	<b><u>Phase III: Presentation Drafts</u></b> Your group should put together a draft presentation based on the topic instructors approve from Phase I. The presentation should be oriented for your peers in the class.
<b>IV</b>	April 18	<b><u>Phase IV: Oral Presentations</u></b> 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.
<b>V</b>	April 18	<b><u>Phase V: Peer Evaluations</u></b> Fill out an evaluation of yourself and your groupmates for the presentation project in CATME.

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

- Throughout the semester, attendance to 3 different activities/events 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 class time will not count toward the three talks required for this assignment.
- **This assignment will be due April 11.**
- **This assignment is mandatory. Failure to complete this assignment will result in failing letter of grade for this course.**

### ***Students Requiring Accommodations***

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, 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/>.

### ***In-Class Recording***

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

### ***Online Course Recording***

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

### ***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 Conduct Code (<https://sccr.dso.ufl.edu/process/student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. 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
- Jennifer Nappo, Director of Human Resources, 352-392-0904, [jpennacc@ufl.edu](mailto:jpennacc@ufl.edu)
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, [taylor@eng.ufl.edu](mailto:taylor@eng.ufl.edu)
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, [nishida@eng.ufl.edu](mailto: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](mailto: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:** <https://counseling.ufl.edu>, 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](mailto: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/>.

**COVID-19**

- You are expected to wear approved face coverings at all times during class and within buildings even if you are vaccinated.
- If you are sick, stay home and self-quarantine. Please visit the UF Health Screen, Test & Protect website about next steps, retake the questionnaire and schedule your test for no sooner than 24 hours after your symptoms began. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 (or email [covid@shcc.ufl.edu](mailto:covid@shcc.ufl.edu)) to be evaluated for testing and to receive further instructions about returning to campus.
- If you are withheld from campus by the Department of Health through Screen, Test & Protect, you are not permitted to use any on campus facilities. Students attempting to attend campus activities when withheld from campus will be referred to the Dean of Students Office.
- UF Health Screen, Test & Protect offers guidance when you are sick, have been exposed to someone who has tested positive or have tested positive yourself. Visit the [UF Health Screen, Test & Protect website](#) for more information.
- Please continue to follow healthy habits, including best practices like frequent hand washing. Following these practices is our responsibility as Gators.

## 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://career.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://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>; <https://care.dso.ufl.edu>.

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