Instructor: Mrs. Cynthia Sain (Rm 262 ChE-SC, 392-0095, csain@ufl.edu)
Supervising Professor: Dr. Rich Dickinson

Office Hours: Tuesday & Wednesdays 4th period (10:40 – 11:30)

1. Description: 1 credit. Discussion of personal and career issues associated with professional development in chemical engineering. Topics include career strategies, ethics, contemporary issues, presentation skills, team dynamics, and intellectual property. (Offered Fall & Spring)

2. Pre-requisites and Co-requisites: None

3. Course Outcomes:
   Upon completion of this course, a student should be able to:
   a. Identify professional work values, learning style, and career objectives
   b. Assemble a professional resume
   c. Create and deliver a 30 second elevator speech based upon work values and career objective/s
   d. Identify the process of ethical decision making based upon professional ethical codes and the 3 Step Ethics Check; analyze an ethical dilemma by applying the 3 Step Ethics Check; create a personal ethics statement.
   e. Identify the 5 Dysfunctions of a Team (Lencioni); analyze team dysfunction and determine best course of actions using Lencioni’s 5 Dysfunctions of a team
   f. Identify Intellectual Property process and issues
   g. Conduct an effective search of contemporary issues using library resources, including identification of quality research sources and use of RefWorks.
   h. Identify components of a professional verbal presentation; create and deliver an 8 – 10 minute verbal presentation
   i. Identify the connections between life-long learning and professional development

4. Contribution of course to meeting the professional component for 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.

5. Relationship of course to ABET program outcomes:
   From the list of (a) through (k) program outcomes listed below, this course addresses outcomes (f), (g), (h), (i), and (j).

   ABET Program Outcomes:
   (a) Apply knowledge of mathematics, science, and engineering
   (b) Design and conduct experiments, as well as analyze and interpret data
   (c) Design a system, component, or process to meet desired needs
   (d) Function on multi-disciplinary teams
   (e) Identify, formulate, and solve engineering problems
   (f) Understand professional and ethical responsibilities
   (g) Communicate effectively
   (h) Understand the impact of engineering solutions in a global and societal context
   (i) Recognize the need for, and engage in life-long learning
   (j) Understand contemporary engineering issues
   (k) Use the techniques, skills, and modern engineering tools necessary for engineering practice

6. Textbooks and Software Required: No textbook; materials will be provided.

7. Recommended Reading:


8. **Attendance and Expectations:**

- Attendance is required.
- **All assignments** must be satisfactorily completed and submitted to earn a passing grade. All assignments posted on Sakai, should be submitted no later than 11:00am the day it is due for full credit (10% deduction/day thereafter. Maximum deduction is 50%).
- Cell phone and musical device use is not allowed during class.
- Laptop computers will be used for the ethics and team dysfunction classes.

9. **Absences and Make-Up Work**

- Requirements for class attendance and assignments and other work are consistent with university policies that can be found at: [https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx).

10. **Grading:**


<table>
<thead>
<tr>
<th>Percentage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

* Completion of assignment required for grade in class. Students who do not meet this requirement will receive an “I” grade. A grade of “I” will be resolved when completion of the assignment is verified.

- Current UF grading policies for assigning grade points can be found here: [https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)

13. **Grading Scale:**

- A (93-100%), A- (90-92%), B+ (87-89%), B (83-86%), B- (80-82%), C+ (77-79%), C (73-76%), C- (70-72%), D+ (67-69%), D (63-66%), D- (60-62%), E (< 60%)

**Schedule and Assignments** (following pages)
<table>
<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment(s)</th>
<th>Assignment(s) Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>9/1</td>
<td>No Class - Holiday – Labor Day</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 3  | 9/8  | Guest Speaker: Stacie Shultz (confirmed 8/14/14) UF Leadership Model/Social Change Model | 1. Professional development reflection  
2. Continue to work on resume | Post on Sakai  
1. Learning Style outcomes  
2. Top 5 Work Values |
| 4  | 9/15 | Resume Critiques  
30 Second Elevator Speech | 1. Create a 30 Second Elevator Speech  
2. Create a Career Development Strategy | Post on Sakai  
1. Professional Development reflection |
| 5  | 9/22 | CRC Career Resources  
Career planning, resumes & interview strategies, events, employment opportunities  
Optimizing Showcase  
Career resources | 1. Continue work on 30 Second Elevator Speech  
2. Take advantage of the many career development opportunities | Post on Sakai  
1. Revised resume from critique  
2. Career Development Strategy |
| 6  | 9/29 | Elevator Speech Presentations | 1. In class presentation: 30 Second Elevator Speech | |

**Attend Career Showcase Technical Day October 1, 2014**

<table>
<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment(s)</th>
<th>Assignment(s) Due</th>
</tr>
</thead>
</table>
| 7  | 10/6 | Contemporary Issue assignment  
Introduction to Ethical Decision Making | 1. Contemporary Issue presentation preparation and planning  
2. Determine date and location of presentations. Collect reliable contact information of all group members  
3. Create a Contemporary Issue abstract | 1. Review the following ethical codes and guidelines for class on 10/27.  
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 |
| 8  | 10/13| Guest speaker: Neelam Bharti (confirmed 8/13/14) Research Strategies | Research Strategies presentations meet in the Marston Science Library MSL 308  
Class will meet in 2 sessions:  
1. 12:50 – 1:40pm  
2. 1:55 – 2:45pm  
Signup for session on Sakai | |
<table>
<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment(s)</th>
<th>Assignment(s) Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>10/20</td>
<td><strong>Guest speaker: Dr. Lenny Terry (confirmed 8/12/14)</strong> Intellectual Property</td>
<td>1. Continue working on Contemporary Issue abstract</td>
<td></td>
</tr>
</tbody>
</table>
| 10 | 10/27| Introduction to Ethical Decision Making | 1. Start a personal ethics statement (see 11/10 for more assignment information) | 1. **In class:** ethical dilemma case study  
2. Names and contact number/email of all small group members  
*Post on Sakai* |
| 11 | 11/3 | **Speaker: Dr. Rich Dickinson (confirmed 8/13/14)** Professional Presentations | 1. Contemporary Issue presentation preparation continued | 1. **Post on Sakai**  
1. Contemporary Issue abstract |
2. Finalize personal ethics statement |  |
| 13 | 11/17| Team Dynamics | 1. Learn and apply Lencioni’s 5 Dysfunctions of a team | 1. **In class** team dysfunction exercise  
*Post on Sakai*  
2. Personal ethics statement/code  
3. Date, Location and time of small group meeting |
| 14 | 11/24| Small group presentations –in lieu of class |  |  |
| 15 | 12/1 | Small group presentations continue | 1. Deliver Contemporary Issue presentation  
2. Evaluate presentations and determine the best for class presentation  
*Post on Sakai (or YouTube)*  
3. Recording of presentation |  |
| 16 | 12/8 | Best of presentations |  | 1. **Post on Sakai**  
1. Professional development reflection  
2. Make sure you have attended 3 Alumni Seminars and sent *Instagram* to Cynthia  
3. Make sure to have attended 3 of the 4 Career Showcase, an information session, corporate event, and/or CRC workshop |
Class presentations

<table>
<thead>
<tr>
<th>Topic</th>
<th>Instructor/Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>UF Leadership Model</td>
<td>(by Stacie Shultz, Center for Leadership and Service)</td>
</tr>
<tr>
<td>Team Dynamics</td>
<td>(by Cynthia Sain)</td>
</tr>
<tr>
<td>Ethics and Responsibilities</td>
<td>(by Cynthia Sain)</td>
</tr>
<tr>
<td>Conducting Research</td>
<td>(by Dr. Neelam Bharti, UF Libraries, <a href="http://www.uflib.ufl.edu">http://www.uflib.ufl.edu</a>)</td>
</tr>
<tr>
<td>Intellectual Property</td>
<td>(by Dr. Lenny Terry, Office of Technology Licensing, <a href="http://www.research.ufl.edu">http://www.research.ufl.edu</a>)</td>
</tr>
<tr>
<td>Presentation skills</td>
<td>(by Dr. Rich Dickinson, Chemical Engineering, <a href="http://www.che.ufl.edu">http://www.che.ufl.edu</a>)</td>
</tr>
</tbody>
</table>

Homework Assignments:

1. Complete Soloman and Felder’s Index of Learning Styles and post your learning styles on Sakai.

2. Complete the Work Values Sort and post your top five values on Sakai.

3. On Sakai, Post a one-page professional development reflection addressing questions such as: Who am I? What is important to me? What do I value in work? What are my strengths that I can contribute to an employer? How will I choose a job or company? What would I like to achieve by graduation? Five years after graduation?

4. Create a resume. Bring a copy to class. Review and mark the resume of a fellow student, making suggestions for possible improvements. On Sakai, post your edited resume.

5. On Sakai, Post a Career Development Strategy. Determine events you will attend before the last day of class. Attend 3 of 4 of the following: Career Showcase, information session, corporate event, and/or CRC workshop.

6. Create and deliver a 30 second elevator speech.

8. Research and Create a personal ethical statement.

9. Select a topic for an 8 – 10 minute Contemporary Issue presentation (including time for questions). The topic should be related to the impact of modern technology and/or chemical engineering practice on society. Submit a title and a one-paragraph abstract for the presentation. Post the date of the presentation and contact information for your small group on Sakai. Use a smart phone or tablet to video record your 10-minute presentation. Upload the video to YouTube or Sakai (100 MB max file size). Critique the presentations. Choose the best to be presented to the entire class.

10. On Sakai, Post a review your reflection from the beginning of class. Are your career goals the same? Did you achieve any goals? Revise goals? How has your professional development plan changed? What is the connection between engineering and life long learning?

11. By the last day of class, attend at least 3 Career Development events (1 each): Information session, Career Resource Center workshop, corporate, department or student sponsored event, and/or Career Showcase.

12. By the last day of class, attend at least 3 Alumni Speaker Series seminars. Seminar dates, times and locations will be posted on www.che.ufl.edu.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students.
Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php.

**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.

**Campus Helping Resources**
Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
Counseling Services
Groups and Workshops
Outreach and Consultation
Self-Help Library
Training Programs
Community Provider Database
Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

Services for Students with Disabilities, 0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/
The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.