Instructor Information

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E-mail: pcharles@mtu.edu
Office Hours: By appointment - Just send an email

Course Identification

Course Number: CH4130
Course Name: Professional Development For Chemists - Senior Seminar
Course Location: 104A Chemical Science and Engineering (bldg. 19)
Class Times: MW 3:05pm - 3:55pm

Course Description/Overview

Professional Development for Chemists - Senior Seminar, is the fourth in a sequence of undergraduate courses designed to provide Chemistry Department majors with the tools they need to be successful in the workplace. Courses in this sequence include:

- PDC I - Orientation
- PDC II - Career Planning
- PDC II - Communication
- PDCIV - Senior Seminar

The main goal of the senior seminar sequence is for students to apply many of the tools they have gained during their career at Michigan Tech via a number of written assignments, oral presentations, peer evaluation, and attendance at departmental seminars.

Some important course dates:

- January 11, 2016 - First introductory meeting
- January 13, 2016 - Presentation on software or technology
- January 18, 2016 - Martin Luther King Day - No class.
- January 20, 2016 - Class canceled in lieu of seminar attendance
- March 7 and 9, 2016 - Class canceled for Spring Break.

The main assignments I have planned are:

- What, Why, and How! - Microsoft Office is one of the most important productivity suites in both Academia and Industry. However, many people are unaware of the tools it has available to make you more efficient and productive. In this introductory assignment, you will
  - Research a feature of Microsoft office - See Canvas
  - Write a short instructional guide to the feature for your fellow students
  - Develop an 18-22-minute presentation on what the feature is, why it is important, and demonstrate how it is used. In the demonstration, you should present novel and useful applications, not just the obvious things.
Evaluate the work of your peers using a provided rubric because I want you to work on providing constructive comments to your peers. You are not helping your colleagues improve if you let them thing that the presentation is perfect, nor are you helping them if you belittle them. So, learning how to provide useful and constructive feedback is essential in the workplace.

- Socially/Globally Important Chemical Compounds - Chemicals have a huge global and societal impact, in both positive and negative ways. Michigan Tech expects that its students have an appreciation of the global and societal impact of their discipline. In this assignment you will:
  - Research the chemistry, global, and societal impact of a chemical compound
  - Write 2500-3500 word paper and a separate document that describes your search methods
  - Develop an 18-22 minute presentation about the compound that is based on your research.
  - Evaluate the work of your peers using a provided rubric because I want you to work on providing constructive comments to your peers. You are not helping your colleagues improve if you let them thing that the presentation is perfect, nor are you helping them if you belittle them. So, learning how to provide useful and constructive feedback is essential in the workplace.

- A third assignment (time permitting), that will be either small group a literature review, or a small group presentation on the global impact of chemistry.
- Attend at least one departmental seminar and report on the presentation.

In addition to the classroom assignments, I am happy to schedule presentations from units such as career services, library, research, if any of those interest you.

**Course Learning Objectives**

1. Develop written technical documents
2. Develop oral presentations
3. Use appropriate resources during presentations
4. Gain an appreciation of the global impact of chemistry
5. Gain confidence in technical presentation to peer groups
6. Practice evaluating peers and giving constructive feedback
7. Constructively evaluate your own progress

**Course Resources**

**Course Website(s)**
- Canvas (mtu.instructure.com)

**Grading Scheme**

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
<th>Grade point</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>88%-100%</td>
<td>4.00</td>
<td>Excellent</td>
</tr>
<tr>
<td>AB</td>
<td>85%-88%</td>
<td>3.50</td>
<td>Very good</td>
</tr>
<tr>
<td>B</td>
<td>78%-85%</td>
<td>3.00</td>
<td>Good</td>
</tr>
<tr>
<td>BC</td>
<td>75%-78%</td>
<td>2.50</td>
<td>Above average</td>
</tr>
<tr>
<td>C</td>
<td>75%-78%</td>
<td>2.00</td>
<td>Average</td>
</tr>
<tr>
<td>CD</td>
<td>55%-58%</td>
<td>1.50</td>
<td>Below average</td>
</tr>
<tr>
<td>D</td>
<td>50-55%</td>
<td>1.00</td>
<td>Inferior</td>
</tr>
<tr>
<td>F</td>
<td>0%-50%</td>
<td>0.00</td>
<td>Failure</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete; for extenuating circumstances outside student's control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Conditional; for extenuating circumstances within student's control</td>
<td></td>
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</tbody>
</table>
Grading Policy

Points for each assignment will be assigned in 25-point increments from zero (not submitted or not presented) to 100 (Excellent). Grades will be based roughly on the following totals:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>100</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>100</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>100</td>
</tr>
<tr>
<td>Seminar</td>
<td>100</td>
</tr>
<tr>
<td>Participation</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total Points</strong></td>
<td><strong>600</strong></td>
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</tbody>
</table>

Course Policies

Late assignments will receive a 10% per day reduction in available points.

You are expected to treat all members of the class with respect. Failure to do so will be reflected in your final grade.

The course is based on submitting work, presenting, peer review, and other class participation. As a result, it will become very hard to complete the course if you do not attend all the classes. While a few excused absences can be accommodated; repeated absences will make it very hard for you to complete the course. Unexcused absences will result in a zero for assignments and peer review that you miss.

Collaboration/Plagiarism Rules

This course follows the university’s rules on collaboration and plagiarism. If you do not understand what is meant by plagiarism, please ask for help. During the development of your presentations and documents, it is acceptable to ask for feedback from your peers, your instructor, or an appropriate learning center. The work, however, must be yours.

University Policies

Academic regulations and procedures are governed by University policy. Academic dishonesty cases will be handled in accordance the University’s policies.

If you have a disability that could affect your performance in this class or that requires an accommodation under the Americans with Disabilities Act, please see me as soon as possible so that we can make appropriate arrangements. The Affirmative Action Office has asked that you be made aware of the following:

Michigan Tech complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disabilities Act of 1990. If you have a disability and need a reasonable accommodation for equal access to education or services at Michigan Tech, please call the Dean of Students Office, at 487-2212. For other concerns about discrimination, you may contact your advisor, department head or the Affirmative Action Office, at 487-3310

Academic Integrity: [http://www.studentaffairs.mtu.edu/dean/judicial/policies/academic_integrity.html](http://www.studentaffairs.mtu.edu/dean/judicial/policies/academic_integrity.html)

Affirmative Action: [http://www.admin.mtu.edu/aoa/](http://www.admin.mtu.edu/aoa/)

Disability Services: [http://www.admin.mtu.edu/urel/studenthandbook/student_services.html#disability](http://www.admin.mtu.edu/urel/studenthandbook/student_services.html#disability)