Chemistry 1990  1 credit P/F
Wednesday 2:30-3:20 via ZOOM

Professor Joanie Hevel, Widtsoe 235, 797-1622, joanie.hevel@usu.edu

Course Description: This required course is designed to provide incoming chemistry/biochemistry students with a sound foundation of how to get the most out of their chemistry/biochemistry education, expose students to exciting areas of chemistry and biochemistry, outline opportunities at USU that will that will help students reach their career goals, and highlight the need for you to master "employability skills" for success. The class includes seminars on topical issues presented by faculty and invited guests, discussions of career options, and activities to learn the best practices at resume writing and professionalism. These topics are essential to success in a chemistry/biochemistry related job, graduate work, or professional school. This class will be administered completely online using synchronous ZOOM lectures/activity sessions during class time and pre-recorded lectures.

Office Hours: by appointment

Times: W 2:30-3:20, COMPLETELY ONLINE using ZOOM and recorded lectures through CANVAS

Requirements: this is a Pass/Fail course
1) Perform outside class assignments.
2) Complete all mandatory in-class activities and assignments.

Texts: There is no assigned text for the course.

Canvas: Information essential to the course will be available through the course Canvas page. This site is found at https://canvas.usu.edu/, username = banner ID. Only students who are registered for the class will have access to the course Canvas pages. Assignments should be submitted on CANVAS.

Provisions: This course will adhere to the USU Academic Policies and Procedures Manual found at the web site http://www.usu.edu/provost/faculty-life/syllabus.cfm

Grading: A final Pass or Fail grade will be assigned based on attendance and assignments/activities.
1) Attendance of all of the zoom meetings is mandatory.
2) Assignments and activities: assignments and activities done during class time are mandatory. Assignments turned in after the deadline will have 2 points deducted from the score for the first day that it is late, with 2 points deducted each additional day that it is late. A student must earn 80% or more of the points associated with these activities in order to pass the class.
3) Activities outside class: a list of activities will be provided at the beginning of the semester. In order to pass the class, each student must participate in 3 activities.

Outside Class Activities; each student must do at least 3 and report on the activity using the template in CANVAS
Chem/Bch Department Zoom Seminar Wednesdays 4-5  http://chem.usu.edu/seminars/index
Biochemistry Graduate Zoom Seminar Fridays, 11:30-12:30
Chemistry Graduate Seminar
Health Professions events
Interview a professional working in the sciences ZOOM with Dr. Dickenson (12/9, 3pm)
Learn about Preparing for Health Professions while at USU VIDEO + ZOOM with Yvonne Kobe 10/7 at 3pm
Working/volunteering in a lab
Chem 4880 Biochemistry or Chem 4990 Chemistry ZOOM Undergraduate Presentations (talks DATES TBA, near end of semester)

Have an idea for a new activity? Send me an email.

Special Events to Consider:
Chemistry & Biochemistry Department Olsen lecture.  http://chem.usu.edu/seminars/index
Chemistry & Biochemistry Department Hansen lecture. Amy Rosenzweig, December 2, 2020 http://chem.usu.edu/seminars/index
Both the American Chemical Society (ACS; ACS.org) and the American Society of Biochemistry and Molecular Biology (ASBMB; ASBMB.org) have defined essential skills (Employability Skills) that you should master before graduation:

1. Laboratory Safety skills
2. Problem-solving and Critical Thinking Skills
3. Communication Skills
4. Team skills
5. Ethics
6. Chemical Information Acquisition and Management Skills
7. Career Preparation

The skills highlighted in orange will be discussed and practiced in this class.

Assignment Details

***Since communication skills are important for your future success, all assignments will be graded with the following rubric:

10% Correct grammar, spelling and punctuation
90% Completeness of assignment

Assignment 1 Identify 2 study habits you think will be useful  DUE ON 9/9
On 9/2 you will get a chance to chat (by ZOOM) with several upperclassman and graduate students about the types of study habits and organizational tricks that have been the most useful to them. Identify two from your discussions that you think will be useful for you in your college career.

Assignment 2 Professional Self-Evaluation-5 things you do well, 5 things you need to work on  DUE ON 9/16  Career Preparation
We will be talking about what it means to be professionally ready (employable!). Meet with your Group on Zoom to exchange ideas. Submit: 1) Identify 5 things you think you have already mastered (do well) and 5 things that you know you need to work on.  2) Pick one thing off the “I don’t do these things well” list and explain how you are going to remedy this deficiency.

Assignment 3 Look over the list of professions. Pick 3 that you would like to explore further (be sure that your schedule does not conflict; many will be during class time but a few will not). Submit your list of three.  DUE 9/16

Assignment 4 Create your resume  Communication Skills, Career Preparation
The Career Services video will present on services available to you as a student of USU, including help with writing your resume. Develop your resume, meet with career services (via WebEx) during your assigned time and have them give you feedback. Revise your resume and submit both the original and the revised versions to CANVAS.

DUE DATES

Group 1 and Group 2-- 9/30  Group 3 and Group 4 --10/14
Group 5 and Group 6 --10/28  Group 7 and Group 8 --11/4
Group 9 and Group 10 --11/18  Group 11 Dec 4

Assignment 5 Scientific presentations and literature  Chemical Information Acquisition and Management Skills, Communication Skills  DUE 11/11
The Science VIDEO will introduce you to how a scientific article gets published and how researchers organize a talk, poster, and paper. It also covers where you can find research articles (PubMed) and the difference between a primary research article, a review, and a non-peer-reviewed manuscript. Watch the video. During class you will Zoom with your group to find articles on the Internet. You will discuss whether the paper is peer-reviewed and/or a review article and what the impact factor of the journal is. You will find a seminar to attend (by ZOOM) and use the template on CANVAS to write a synopsis of the seminar.

Assignment 6 Create a bibliography and cite correctly  Chemical Information Acquisition and Management Skills, Communication Skills  DUE 10/14
The Bibliography and Zotero VIDEOS will review what a proper reference and bibliography look like and how to use Zotero (a bibliography and reference managing software). You will identify three primary research articles (review articles and non-peer-reviewed articles are not allowed) that you find interesting and write a short (4-7 sentences) narrative about what was in those three articles and you will use Zotero to reference the paragraph. After the paragraph should be a formal bibliography (Use the “Nature” style. Download here:  https://www.zotero.org/
Assignment 7, 8, and 9  DUE ON 12/2  Professions  Career Preparation
Attend (by Zoom) your three professions presentations. Using the template on CANVAS, answer a few questions.

Assignment 10  Introduce yourself in a professional manner DUE ON 12/2  Communication Skills, Career Preparation
On 12/2 you will need to introduce yourself to either a faculty member, postdoctoral associate, lecturer or graduate student (all have degrees higher than your high school diploma). You will enter the waiting room of a Zoom session and be admitted one at a time by the faculty member. You should think about a sentence or two that you can use to start a small conversation. The introductions will take place during class time. Think about eye contact and speaking clearly.

Assignment 11  SURVEY  DUE ON 12/4
Take the end of class survey.

Grading Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Points</th>
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<tbody>
<tr>
<td>Attendance</td>
<td>6 group classes, 3 points each class</td>
<td>18</td>
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<tr>
<td>Assignments 1</td>
<td>Identify 2 study habits you think will be useful</td>
<td>2</td>
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<tr>
<td>Assignments 2</td>
<td>Professional Self-Evaluation-5 things you do well, 5 things you need to work on</td>
<td>5</td>
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<tr>
<td>Assignments 3</td>
<td>Pick 3 professions to explore</td>
<td>5</td>
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<td>Assignments 4</td>
<td>Original resume and corrected resume</td>
<td>10</td>
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<tr>
<td>Assignments 5</td>
<td>Attend a seminar and submit a synopsis</td>
<td>5</td>
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<tr>
<td>Assignments 6</td>
<td>Find primary articles, write a synopsis with a proper bibliography</td>
<td>10</td>
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<tr>
<td>Assignments 7</td>
<td>Career exploration</td>
<td>10</td>
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<tr>
<td>Assignments 8</td>
<td>Career exploration</td>
<td>10</td>
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<tr>
<td>Assignments 9</td>
<td>Career exploration</td>
<td>10</td>
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<tr>
<td>Assignments 10</td>
<td>Introduce yourself in a professional manner</td>
<td>10</td>
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<tr>
<td>Assignments 11</td>
<td>Survey</td>
<td>5</td>
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<td>Total</td>
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<td>100</td>
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<tr>
<td>Outside Class Activities</td>
<td>Varied, see approved list and fill out the appropriate form</td>
<td>3</td>
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Grading scale: 80% of class points + 3 outside activities = Pass
## Calendar for the semester

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic/Title</th>
<th>Assignments INTRODUCED</th>
<th>Due Date</th>
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</table>
| 9/2  | -Organizational meeting/syllabus- Zoom Class mtg 2:30pm  
-Best study/organizational habits- Speed advice with upperclassmen Zoom 3-3:20pm  
--Download Zotero NOW for later | A 1- Identify 3 study habits you think will be useful | A1 9/9 |
| 9/9  | -What does it mean to be professionally ready?/Conduct & correspondence / Review of different professions that we will encounter this semester Zoom Class Mtg 2:30  
-Meet your group members for the semester and discuss professionalism- Student group Zoom 3pm | A 2- Professional Self-Evaluation-5 things you do well, 5 things you need to work on  
A 3 – Review the list of professions that we will cover this semester. Make a list of 3 to participate in (be sure to check the schedule) | A2 9/16  
A3 9/16 |
| 9/16 | -Resume building/ Opportunities on campus with Sophie Bassett – Career Services Video  
-Questions taken by Zoom at 3pm | A 4- Create your resume; get feedback from Career Services (you will have an assigned time to meet); polish your resume; submit both versions | A4-EACH GRP HAS THEIR OWN MTG TIME & DUE DATE |
| 9/23 | Scientific talks/Scientific literature / scientific seminars /peer review /pubmed – Science Video  
Surf the internet during class and discuss articles you find with your group – Student group Zoom 3pm | A 5- Attend a seminar (see a list in the syllabus). Using the template available on CANVAS, write a short synopsis of the seminar. | A5 11/11 |
| 9/30 | -Bibliographies Video  
-Zotero Video  
-Questions taken by Zoom during class period | A 6- Download Zotero; find 3 peer-reviewed primary articles; write a synopsis of the articles and reference the narrative using Zotero. Make a bibliography using Zotero. | A6 10/14 |
| 10/7 | -Advising with Jordan Truex – Zoom Class mtg 2:30pm  
OPTIONAL- Learn about Preparing for Health Professions while at USU Q&A 3-3:30 | | |
| 10/14 | Professions:  
Chemistry and Biochemistry Academic Lecturer 2:30-3  
Clinical Technician 3-3:20 | A 7,8,9- Using the template on CANVAS, write a short summary of the profession, what you found interesting/surprising | A789 12/2 |
| 10/21 | Professions:  
Molecular-based Medical Diagnostics Research and Development Technician 2:30-3  
Human Molecular Genetics Diagnostics Research and Development Scientist 3-3:20 | | |
| 10/28 | Professions:  
Business Financial Analyst 2:30-3  
Professor and Director of Emergency Health Sciences 3-3:20 | | |
| 11/4 | Professions:  
Emergency Medical Physician and Medical Toxicology Fellow 2:30-3  
Scientific Writer 3-3:20 | | |
| 11/11 | Professions:  
Federal Lab Scientist 2:30-3  
Pharmaceutical Research Scientist 3-3:20 | | |
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Details</th>
<th>Notes</th>
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<tbody>
<tr>
<td>11/18</td>
<td>Professions</td>
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<tr>
<td>11/25</td>
<td><strong>NO CLASS, Thanksgiving Holiday</strong></td>
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<tr>
<td>12/2</td>
<td>Group meetings with a faculty member;</td>
<td>A 10 – Introduce yourself in a professional manner, meet a faculty member</td>
<td>A10 12/2</td>
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<tr>
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<td>introduce yourself in a professional manner-</td>
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<td>Zoom X</td>
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<td>12/9</td>
<td>Zoom feedback session</td>
<td>A 11 – Take the end of class survey</td>
<td>A11 12/9</td>
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<td><strong>OPTIONAL</strong>: Learn about grad school 3-3:30</td>
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