

**CACHE Discovery 2: Careers in Science**  
**BSC 3930**  
**Fall 2018**  
**1 credit**

Instructors:

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OE 230  
ECS 158

Office Hours:

Monday, 10AM -11:30AM  
OE 230

\*\* We will only check class emails weekdays between 9:00 am and 5:30 pm.

Course Purpose:

This class is designed to expand and develop students' skills as future professionals in STEM fields. Through hands-on professional development training, the Discovery 2 course helps prepare students for graduate school and careers in STEM fields. Students will gain confidence and experience as they build their resumes, CVs, and LinkedIn profiles, practice writing applications, research statements, and cover letters for graduate school, medical school, and NSF Graduate Research Fellowships, and improve their public speaking and networking skills.

Course Outcomes:

Through this course, assuming you fulfill the expectations outlined in the syllabus, you will be able to:

- Identify options in STEM career pathways.
- Establish career objectives and develop skills necessary to achieve them.
- Search and apply for relevant research opportunities
- Develop a comprehensive CV/resume
- Connect with scientists in a professional way
- Improve writing and oral presentation skills.
- Develop competitive fellowship applications.
- Engage in community-building initiatives, contribute to strengthening community connections to science

Text:

No textbook is required. Any required readings will be provided by course instructors

### **Classroom Etiquette:**

The ways in which we treat one another matters. In order to learn, every person must both be and feel safe enough to express themselves. As members of a learning community, we should strive to create a constructive learning environment for the entire class. Specifically, this means members of this class:

- Show respect and consideration for those speaking in class. For instance, avoid talking when an instructor or a classmate is speaking to your group or the class as a whole.
- Be as actively engaged in the class activities and discussions as you can. You can facilitate this by turning all electronic devices to silent or vibrate so they don't distract you or the learners around you. Also avoid accessing materials not related to the course during class time.
- Be prepared to contribute to the learning of your group. Share potential answers or questions you have and solicit questions and potential answers from all your group members, especially from those who are most quiet. If someone is struggling with a concept that you understand, help them. Explaining something to a peer both increases your own ability to remember it into the future (McKeachie and Svinicki 2006) and makes sure that no one remains confused at the end of the activity.

### **Equity in Learning:**

This class will be conducted in an environment that is open, welcoming, and safe to all students. The instructors are willing and committed to providing an atmosphere of support and affirmation for all people. Do not display disrespectful behavior toward any individual based upon age, ability, race/color/ethnicity, religious/spiritual, political affiliation, socioeconomic, immigration, marital, military/veteran status, gender identity/expressions, sexual/affectional orientations, relationship status, and/or anything that is likely to be perceived as disrespectful to someone's background, culture, or identity. For instance, some derogatory, but commonly used language includes "that's gay" or "that's retarded." Unprofessional, derogatory, and/or offensive behavior may result in disciplinary action.

### **Grades:**

This course uses a competency-based grading scheme. This means we will evaluate you as if you were on the job or a graduate student: you either meet the standards of the task (pass the assignment) or you do not (fail the assignment). Your instructors will work closely with you throughout the term to make sure you are prepared for these assignments. Five major assignments contribute to your grade as well as attendance and participation in reflective notebook entries.

Use the following breakdown to determine and plan for the grade you want to work toward in this class:

**To earn an A:** Demonstrate mastery of all four assignments. Attend 90% of class sessions on time (**i.e., can be late or absent at most 2 times in the term**).

**To earn a B:** Demonstrate mastery of three of the four assignments. Attend 80% of class sessions on time.

**To earn a C:** Demonstrate mastery on two of the four assignments. Attend ~70% of classes on time

**To earn a D:** Demonstrate mastery on one or none of the assignments or attend < 70% of classes on time.

**Assignments:**

The majority of the work for this class will be done outside of class. We will practice, critique, and develop skills in class, but expect to spend, on average, two hours a week outside of class on class assignments.

1. Develop a comprehensive CV and resume. A CV and a resume are not the same thing. We will present CVs and resumes to you in class and provide advice on how to develop your own.

Specifications to pass this assignment. Students will submit both a CV and a resume to the instructors. CVs and resumes must be proofread and well organized before being submitted.

2. Undergraduate Research Experience (URE) applications. We will spend class time teaching you how to search and apply for undergraduate research opportunities (or related medical school opportunities). You will be required to prepare an application to a program of your choice, regardless of whether you intend to participate. Your instructors will review your application and provide feedback.

Specifications to pass this assignment. Identify a relevant opportunity. Develop a complete application package following program guidelines. Applications must be proofread and well organized before they are submitted to your instructors. Applications do not have to be submitted to the program.

3. Simulated job search. We will start at the very beginning, looking at job postings, and work all the way through to submitting a complete job application. You will be required to prepare a complete application package although you do not have to apply to the job.

Specifications to pass this assignment. Identify a relevant opportunity. Develop a complete application package following program guidelines. Applications must be proofread and well organized before they are submitted to your instructors. Applications do not have to be submitted to the job posting.

4. Find and interview scientists or relevant professionals. The best way to learn about different careers is to talk to the people that are in them. We will teach you how to find scientists or relevant professionals whose careers you are interested in, how to contact them for an information interview, and what to say/do during these interviews.

Specifications to pass this assignment. Identify three relevant career professionals you and find/read their CV. Contact each professional and complete a ~30 minute informational interview.

- Final paper and presentation. Write a reflection on what you learned during your informational interviews and how this influences your own career plans and present what you learned during your informational interviews.

Specifications to pass this assignment. Individually write a 4-5 page (double-spaced, Times New Roman 12 pt font) reflection on your interviews that answers the following questions concisely and clearly. What did you originally think a career in science would be like? What did you find out a career in science is actually like? What experiences helped the scientists you interviewed achieve their goals? Would working in their jobs be a satisfying career for you? Why or why not?

Oral Presentations:

	Content	Quality
Presentation	<ul style="list-style-type: none"> <li>• 20 minutes in length</li> <li>• Introduction: attention grabbing and establishes credibility</li> <li>• Background: sufficient for non-science audience</li> <li>• Methods and Results: Contains enough information that viewer understands how conclusions reached</li> <li>• All information relevant to overall message</li> <li>• Relevance of topic to audience emphasized</li> <li>• Slides reinforce key points</li> <li>• Citations</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation has an obvious structure/order that is easy for a viewer to follow.</li> <li>• Logical sequence to information</li> <li>• Appear credible to viewers</li> <li>• Language appropriate for audience</li> <li>• Scientifically accurate</li> <li>• Time spent on points reflects their relative importance</li> <li>• Slides eye catching without being overwhelming</li> <li>• Proper citation format (APA)</li> </ul>
Speakers	<ul style="list-style-type: none"> <li>• Contribute information beyond what is written on the slides</li> <li>• Answer questions professionally</li> </ul>	<ul style="list-style-type: none"> <li>• Maintains good eye contact with audience</li> <li>• Audible voice</li> <li>• Professional appearance</li> <li>• Practiced delivery</li> </ul>

**Late work.**

Much of the progress you will make in this class hinges on assignments getting done at specific times. So, please try to get your work done on time. If something comes up communicate with me in advance. Due date extensions require at least two full weekdays advanced approval from your instructors. Late work that you have not spoken to an instructor about in advance will cause you to fail an assignment.

**Schedule of Topics:**

<i>Week:</i>	<i>Date:</i>	<i>Topics of Day:</i>	<i>Due at the start of class:</i>
1	W 8/22	Overview of this course	
2	W 8/29	What is a CV? What is a resume?	Complete my IDP online survey and RCR
3	W 9/5	CV/resume spin session	Bring a copy of your CV and resume
4	W 9/12	What is a URE? How do you find one? How do you apply?	Completed CV and resume due
5	W 9/19	URE applications	Select a URE opportunity you are interested in
6	W 9/26	What is an elevator pitch? Networking	Completed URE application due
7	W 10/3	What is science communication?	Be prepared to present your elevator pitch!
8	W 10/10	Guest presentation #1	
9	W 10/17	Job search: where to even start?	
10	W 10/24	Job search review Cover letters	Bring in three jobs you are interested in.
11	W 10/31	Guest presentation #2	Bring a complete job application to class
12	W 11/7	Public speaking	
13	W 11/14	LinkedIn Sending thank you notes 5 year plan "leaving the lab"	

		Professional societies and why they are important to join	
14	W 11/21	Thanksgiving Eve	Develop a 5 year plan. What are you ready for? What do you still need to learn?
15	W 11/28	Final Presentations	

\*\*The schedule in this syllabus reflects a tentative, working document: it may be subject to changes based on class progress and the direction of student interests.