

Science Careers After UMW
CHEM 399/PHYS 399
Spring 2025

Instructors:

Professor Janet Asper

Office: Jepson 435B

Email: jasper@umw.edu

Help Session (AKA office hours)

In person: Monday, Friday 9:30-10:30 AM

Zoom office hours: Monday 7:30-8:30 PM,

Wednesday, Thursday 3:30-4:30 PM,

Thursday 9:00-9:30 AM

Also available by appointment. [Bookings](#)

Professor Varun Makhija

Office: Jepson 464

Email: vmakhija@umw.edu

H.W. Help Hours: MTRF 11:00 am to 12:00

pm, W 5:00 pm to 7:00 pm

Class Meeting

Monday 3:00-3:50 PM, Jepson 219

Required Course Materials:

- Chem Majors: Undergraduate student membership to the American Chemical Society (\$25). [Link to membership page](#)
- Phys/APhys Majors: SPS/APS membership (<https://www.aps.org/careers> talk to Dr. Makhija/Dr. Fleenor about the fee)
- Access to Canvas
- Some assignments may require printed submissions. \$20 on your EagleOne card for printing, or access to a working printer.
- Business casual outfit for mock interviews at end of semester.

Course Description:

This course is designed for juniors and seniors in the chemistry or physics programs. It will focus on the job search/graduate school application process including how to find jobs to apply for, write a resume/CV, draft a compelling cover letter and land an interview. These skills are valuable across many scientific disciplines and will prepare students for their futures after Mary Washington. It will also count for the After Mary Washington (AMW) requirement

After completing the course, a student should

- Be able to locate information and ads for jobs and/or graduate schools

- Be able to craft a resume/CV tailored to a job and representative of their skills
- Be able to write a Cover Letter or Personal Statement that will be centered around the job of interest while being reflective of the student's background and skills
- Be able to seek information about jobs directly from potential employers using informational interviews
- Be prepared for virtual and in-person interviews

After Mary Washington Learning Outcomes

1. Students will explore their own values, interests, skills, and strengths that guide their personal and professional aspirations.
2. Students will develop and articulate their personal and professional identities in appropriate modalities.
3. Students will create professional relationships which support life-long career growth and satisfaction.

Grading

The grade in the course will be either Pass or Fail. In order to earn a grade of Pass, a student must complete ALL assignments and attend at least 80% of class meetings (attendance means being both present and engaged in the class activity for the day). Failure to comply with these requirements will result in a grade of Fail.

Assignments

This course will have several types of assignments, which will be explained and assigned via Canvas. Students must be sure to check Canvas regularly for new assignments and updates. Here are examples of the possible major assignments in the course with a brief description of each. More details for these assignments will be released throughout the semester.

Reflections – Several times throughout the semester students will write a short ~ 1/2 page “reflection” about what they learned during an activity or by attending an event (ie. A Career panel). Students will journal what they learned from the activity, what additional information they would like to know, and how what they learned can be applied to their career goals. This assignment is used to encourage engagement. Students will need to complete 80% of these reflections to earn a Pass for the course.

Resume/CV. – During the course of the semester, students will write several drafts of a Resume and Curriculum Vitae (CV) based on their career goals. Generally students interested in industry jobs should prepare a resume and students interested in graduate

school prepare a CV. This will be up to the discretion of the student. All students must write a Resume or C.V. in order to earn a grade of Pass.

Cover Letter/Personal Statement - Students will write several drafts of a Cover Letter and Personal Statement based on their career goals. Like the resume or CV, this will be at the discretion of the student BUT all students must write a Cover Letter or Personal Statement in order to earn a grade of Pass.

LinkedIn Profile – Students will create a personalized LinkedIn account as a part of this course. LinkedIn represents a huge connection to the professional world. The creation of a profile will be required to earn a grade of Pass.

Peer Reviews – Students will submit several different materials during the semester (Resume, Cover letter, etc.). Students will be assigned two peers to review for each major assignment. During the peer review activities, students will give each other feedback on ways in which they can improve their materials. Submission of feedback will be required to earn a passing grade.

Informational Interviews – Students will complete two informational interviews throughout the course of the semester and will write a short summary about who you met with, how you contacted them, and what you learned from the interview. One interview will be completed before Fall break and the other before the last day of class. Students will be responsible for identifying the people to interview.

Mock Interview – Near the end of the semester students will give a mock job interview based on their particular career aspirations. Students will receive constructive feedback on their responses.

Uploading Files to Canvas: (Talk with Varun about this)

Many times, throughout the semester, you will be required to upload files into Canvas. Please note that the ONLY file types you should EVER upload are .pdf, .doc, .docx, or .jpeg (only image type it can display). A recommended way to upload images is to paste them into a word document in sequence, save the document as .docx and then upload the file. There are many other ways to do this, but canvas works reliably with those file types.

Honor System

Any assignment for which you will receive a grade (unless designated as a group assignment) must be completed and pledged as your own work. The honor pledge must be written in full: I hereby declare upon my word of honor that I have neither given nor received unauthorized help on this work. (Signature). It is your duty as students and ours as faculty

to uphold the Honor Code, which is described in detail in the Guidebook & Constitution. Suspected violations of the Honor Code will be addressed according to the policy established by the Honor Council. I will not grade an assignment without a signed pledge.

Use of Artificial Intelligence (AI)

The use of artificial intelligence (AI) in the preparation of materials for job and graduate school applications is a rapidly evolving area of discussion. We will read about and discuss the relevant issues during this course.

The purpose of this course is to learn how to prepare for Life After UMW, and it is prudent to ensure that everyone in this class can do the required tasks in applying for jobs and graduate school on your own, without the use of AI. Then if it is helpful/prudent/permissible to revise the work using AI, you will be able to do that as the available tools evolve.

Each assignment in this course will clearly stipulate the extent of AI use that is permitted for the assignment. Use of AI tools outside of those guidelines will be considered an Honor Violation and submitted to the Honor Council for investigation. Use of tools for editing (Grammarly, etc) is permitted, but must be cited in your work.

Inclusive Learning

I feel strongly that the classroom and laboratory should be inclusive environments where People from different backgrounds, temperaments, experiences, and life circumstance can all participate in shared learning. I expect everyone to follow UMW's ASPIRE values. Listening, respectfulness, and civility are cornerstones of inclusive learning and will be expected from everyone.

Course Recording Policy

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use. Students who wish to record lectures or class activities for study purposes must inform the faculty member first. Students with approved accommodations from the Office of Disability Resources permitting the recording of class meetings must present the accommodation letter to the instructor in advance of any recording being done. On any days when classes will be recorded, the instructor will notify all students in advance. Distribution or sale of class recordings is prohibited without the written permission of the instructor and other students who are recorded. Distribution

without permission is a violation of educational privacy law. This policy is consistent with UMW's Policy on Recording Class and Distribution of Course Materials.

Disability Resources

The Office of Disability Services has been designated by the University as the primary office to guide, counsel, and assist students with disabilities. If you receive services through that office and require accommodations for this class, please make an appointment with me as soon as possible to discuss your approved accommodation needs. Bring your accommodation letter with you to the appointment. I will hold any information you share with me in the strictest confidence unless you give me permission to do otherwise. Any student with particular needs should contact the Office of Disability Resources; 401 Lee Hall or at 540-654-1266. They will require appropriate documentation of a disability.

Title IX

University of Mary Washington faculty are committed to supporting students and upholding the University's Policy on Sexual and Gender Based Harassment and Other Forms of Interpersonal Violence. Under Title IX and this Policy, discrimination based upon sex or gender is prohibited. If you experience an incident of sex or gender-based discrimination, we encourage you to report it. While you may talk to your instructor, understand that as a "Responsible Employee" of the University, they must report to UMW's Title IX Coordinator what you share. If you wish to speak to someone confidentially, please contact the below confidential resources. They can connect you with support services and help you explore your options. You may also seek assistance from UMW's Title IX Coordinator. Please visit <http://diversity.umw.edu/title-ix/> to view UMW's Policy on Sexual and Gender Based Harassment and Other Forms of Interpersonal Violence and to find further information on support and resources.

Tentative Schedule: Dates and times may change depending upon interest and other factors.

Date	Topic	Assignments
Week 1	Introductory Discussion – Needs and Wants for the course	1. Reflection: Self Goals 2. Pre-class attitude Survey
Week 2	Explore: Graduate School vs Industry Jobs (government etc)	Locate three Job Website links
Week 3	Career Panel	Reflection: Career Panel

Week 4	Job and Graduate School Searching Nuts and Bolts	Find two places to look for Jobs and evaluate them
Week 5	Resume/CV writing Workshop	Bring preliminary Resume/CV to workshop
Week 6	Resume/CV Peer Review	Bring updated Resume/CV to class for Peer Review
Week 7	Cover Letter Workshop	1. Turn in Final Resume/CV 2. Bring any Cover letter or personal statement previously written to class
Week 8	Cover Letter Peer Review	Bring updated Cover Letter to class for Peer Review
Week 9	Social Media Branding: LinkedIn Tutorial	1. Turn in Final Cover Letter 2. Reflection: Personal Branding
Week 10	LinkedIn Profile Peer Review	Create a LinkedIn Profile before class for Peer Review
Week 11	Interview Skills and Question Crafting	1. Turn in Final LinkedIn Profile 2. Submit two questions you have about interviewing
Week 12	Mock Interviews Day 1	Bring Two Interview Questions to the interview
Week 13	Mock Interviews Day 2	Bring Two Interview Questions to the Interview
Week 14	Personal Finance Discussion and Offer Evaluation	Reflection: You got a Job offer, now what?
Week 15	Tying it all together: Group Discussion	Post-class attitude Survey

Last day to drop a course: September 9

Last day to withdraw from a course or change to pass/fail grading: October 21