# **Longwood University**

Department of Chemistry & Physics Farmville, VA 23909

## **Chemistry 498: Honors Research in Organic Chemistry**

Course Information:	Fall semester Hours TBA 3 credit hours
Instructor:	Dr. Andrew A. Yeagley Rm. 308C Chichester Science Center (434) 395-2582 yeagleyaa@longwood.edu
Office hours	TBA
Textbook:	All readings will be from scientific journals and will be found online.
Course Description:	Students conduct research in chemistry under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499.
Important Dates	

## Important Dates

Drop/Add Info:

Last day to drop/add a class: Tuesday, September 3rd Last day to change registration or withdraw from a course: Friday November 6th

*Grading*. Your grade will be based on attendance, participation, progress toward thesis project, and project update provided to your advisory committee and SHR committee.

Attendance:	200 points
Participation/Involvement:	300 points
Outlining Schedule	50 points
Progress:	100 points
Update Summary:	50 points
Total:	700 points

Final Grades will be assigned as follows: A's: 90+, B's: 80-89, C's: 70-79, D's: 60-69, F's: <60

### Course Objectives.

- ✓ Apply library resources towards presenting and supporting a research question.
- ✓ Independently carry out a disciplinary specific study
- ✓ Revise a research question based on previous results (literature or experimental).
- ✓ Dissemination of discipline specific findings in the form of a written summary.

### Course Outcomes.

- $\checkmark$  Students will be able to exercise critical thinking in setting problems and conducting an inquiry.
- $\checkmark$  Students will demonstrate information literacy in finding, evaluating, using sources, and considering evidence
- ✓ Students will communicate effectively in expressing results (written).

Course Schedule.

Date	Lab	Date	Lab
Week 1	Layout Schedule with Advisor	Week 9	Independent Study
Week 2	Independent Study	Week 10	Independent Study
Week 3	Independent Study	Week 11	Independent Study
Week 4	Independent Study	Week 12	Independent Study
Week 5	Independent Study	Week 13	Independent Study
Week 6	Independent Study	Week 14	Independent Study
Week 7	Independent Study	Week 15	Prepare Semester Summary
Week 8	Independent Study	Week 16	Submit Summary

*Generation of schedule*. You are solely responsible for making sure that your project is making adequate progress. If you do not know what adequate progress is for your project then ask your advisor. If your project has not made adequate progress toward your thesis and research goals by the end of your semester because you weren't sure what that meant or was then this still falls on you for not defining these things with your advisor. In short, initiate this conversation yourself if you must.

*Participation/Involvement*. You are expected to play a major role in navigating and directing the outcomes of your project. This means you need to take the initiative to express your thoughts regarding any and all parts of the process. You may not simply just "do as the instructor says." If something is not understood, the project is not going as planned, or it is leading you into material you are less comfortable with then take some time to search the literature for the information you need. Alternatively, initiate a discussion with your faculty advisor about the material you don't understand or simply could be more helpful to the project to consider in more detail. Do not wait for your faculty advisor to figure out what it is you don't know or understand. Research will fail to work as planned, lead you astray, or may feel overwhelming at times. Never take this to mean it can't be done or that you were wrong!

"If we knew what we were doing, it would not be called research. It would be called search." - Anonymous

*Progress.* Sometimes inquiry and investigations can be distracting. You can ask a lot of questions and do a lot of research, but have nothing to show for any of it in the end. Make sure that you are constantly asking yourself how your current research and/or inquiries are leading you to a final picture. If things are going very poorly and you feel that things are going to fall short of expectations then make sure to involve your faculty advisor. Find out if your research question can be reconsidered, if you have time to implement other resources, or if what you have is simply more meaningful that you have considered. Your faculty advisor will be considering whether you have made adequate progress towards your thesis and whether you will be able to feasible complete the thesis at the end of 499 when assigning this grade.

*Committee Update.* You will have to briefly summarize (1-2 pages) your accomplishments throughout your 498 course and submit this document to your thesis committee as well as the Senior Honors Research Chair. This document is as much a show of progress to the committee as it is your opportunity to illustrate places that you might need advice. Take the time to outline the work you have done as well as use the expertise of your committee to help guide the final stages of your project. In your closing remarks, when you discuss how you plan to close up the project in 499, make sure to emphasize the places you still need guidance. Then make similar inquiries in the email to the committee with your send out your written summary.

*Attendance.* You are expected to devote 3 contact hours per credit or 9 hours a week on your project. That is as a normal 3 credit class, 1 in person hours and 2-3 outside of class hours for each credit. This may be divided up in an irregular fashion in that you may be nine hours in-lab, in studio, or one-on-one for a week then spend 9 hours reading, writing, or working independently. Regardless of the schedule that you and your faculty have worked out make sure you are checking in with your thesis advisor and that he or she knows you are making progress.

In addition, remember that you are to adhere to the university attendance policy.

a. Instructors may assign a grade of zero or "F" on work missed because of unexcused absences.

- b. Instructors have the right to lower a student's course grade by no more than one letter grade if the student misses 10% of the scheduled class meeting times for unexcused absences.
- c. Instructors have the right to assign a course grade of "F" when a student has missed a total (excused or unexcused) of 25% of the scheduled class meeting times.

*Special Needs*. If you have a physical, medical, psychological, or learning disability that is going to impact your attendance or require accommodation, please let me know. In order to ensure that your learning needs are appropriately met, you will need to provide documentation of your disability or medical condition to the Director of Disability Resources. The Office of Disability Resources will then provide a letter of verification of disability that describes the accommodations needed for this class. This office is located in Graham Hall, room 116, and the Director may be reached by phone at 434-395-2391.

Academic Honesty. You are bound by your honor pledge...

I, ....., having a clear understanding of the basis and spirit of the Honor Code created and accepted by the student body of Longwood University, shall at all times govern my university life according to its standards and actively work to support its principles, thereby thoughtfully accepting my responsibility for preserving the honor and integrity of all past, present and future members of the Longwood University community of scholars. I will not lie, cheat, or steal, nor tolerate those who do.

*Facemask Statement*. For the 2020-2021 academic year, students are required to wear a face covering at all times inside academic buildings, including during class and in the hallways, restrooms, and elevators. This policy is contingent on updated CDC guidelines.

Face coverings must cover the mouth and nose, fit snugly against the side of the face, and appropriately reduce aerosol emissions. Cloth face coverings should be made of more than one layer of fabric. Exceptions are possible only in the event that the content of the course is impossible to achieve with a face covering (for example, playing certain musical instruments) and provided that other protective measures are in place. According to the CDC, face shields and masks with unfiltered exhaust valves are not appropriate face coverings.

Students without appropriate face coverings may be denied entry into the classroom and be counted absent for that day. Faculty and students may report those who refuse to wear a mask to the Office of Student Conduct and Integrity.

*Protecting Intellectual Property.* Content and materials for this course are for your learning only and should not be shared with others outside of the class. This includes the materials located within the learning management system, information sent to you through email, and/or content provided to you through webcasting with your professor. You may not share your course connection information (login or password), your content received through Canvas, or any videos sent to you that are specifically for this course. This includes sharing postings or recordings made by the instructor or students without permission of the originator.

When you are attending a course through web-conferencing (for example, Zoom), there should not be other persons interacting with the system or attending the session.

Any violation of this policy can result in disciplinary action. Faculty or students may report those who violate University policies regarding intellectual property to the Office of Student Conduct and Integrity.

*Special Needs*. If you have a physical, medical, psychological, or learning disability that is going to impact your attendance or require accommodation, please let me know. In order to ensure that your learning needs are appropriately met, you will need to provide documentation of your disability or medical condition to the Director of Disability Resources. The Office of Disability Resources will then provide a letter of verification of disability that describes the accommodations needed for this class. This office is located in Brock Hall and the Director may be reached by phone at 434-395-2391. I and the office will keep all this information confidential.

*Mental Health Resources.* Stress and anxiety are very typical reactions to college life and many students have experienced significant benefits from participating in counseling. Longwood's <u>Counseling and Psychological</u> <u>Services (CAPS)</u>, located in the Health and Fitness Center, is available to all students at no cost. Appointments can be scheduled by phone (434)395- 2409, during the hours of 8:15 a.m. -5:00 p.m. Monday-Friday. **Resident Education Coordinators (RECs)** and **Resident Advisors (RAs)** are additional resources to students. For emergency situations, please call (911) or contact the Longwood University Police Department at (434)395-2091.

*Reporting of Crimes and Sexual Misconduct.* In accord with its history and mission, Longwood University believes that each individual should be treated with respect and dignity and that any form of crime or violence is incompatible with Longwood's commitment to the dignity and worth of the individual. Longwood University is committed to providing a healthy living, learning and working environment which promotes personal integrity, civility and mutual respect. If you have been the victim of a crime or sexual misconduct, we encourage you to report this. If you disclose this to a faculty member or employee (with the exception of our Limited Reporting and Confidential Reporting Resources; for example, the <u>Counseling and Psychological Services (CAPS)</u> staff, they are required by law to notify the appropriate University officials. The faculty member or employee cannot maintain complete confidentiality and is required to report the information that has been shared. Please know that all reported information is treated with discretion and respect and kept as private as possible. For more information about your options at Longwood: <u>http://www.longwood.edu/titleix</u>