CS800 -- Research Methods

Spring 2024

Syllabus

Meeting time: Mondays 1:00pm – 3:40pm, live and online via Zoom

This is a required course for all new PhD students

Course Overview

Catalog Description: Introduction to research methods in computer science. Topics include academic publishing, academic writing, literature reviews, responsible conduct of research, and presenting research results. Research faculty will present overviews of their research and how research is conducted in their labs.

Instructor

Prof. Stephan Olariu: olariu at cs.odu.edu, <https://www.cs.odu.edu/~olariu/>

Office hours: M 3:40-4:40pm by appointment

Course Delivery Method

This course will be organized based on the "flipped classroom" model. Students will be assigned readings that will be due before the class meeting time. Class time will be spent on discussions of the readings and in-class work. **It is essential that each student be fully prepared to participate in class discussions each week.**

This course will be delivered in a hybrid method, with one face-to-face section in a traditional classroom and several online sections:

* CRN 27606 - in-person (DRGS 2114)
* CRN 27410 - WC2 (in Hampton Roads)
* CRN 27411 - WC5 (in Virginia, but outside Hampton Roads)
* CRN 27413 - WC7 (in the US, but outside of Virginia)

All course materials, including the link to the Zoom class session, will be made available in Canvas. The audio of in-person class meetings and all materials projected in class will be live streamed via Zoom and recorded for later viewing. Online students are strongly encouraged to actively participate in the Zoom session during the regular class meeting time. Online students must meet the same deadlines as face-to-face students. All deadlines are based on the local time zone in Norfolk, VA.

Spring 2024 COVID-19 Policies

As announced, all students, faculty, and staff who participate in on-campus activities must be fully vaccinated and boosted or have received an exemption (and be tested weekly). In addition, face masks are required for all individuals in indoor public spaces, including classrooms.

Students experiencing symptoms of COVID-19 should seek testing through the University's Student Health Center or their local health care provider and notify the University's COVID Cares Team at covidcares@odu.edu.

Students who are uncomfortable with participating in the classroom are encouraged to switch to the WC2 section to enable other students who might prefer the face-to-face environment to have a seat.

You are strongly encouraged to stay home if you are not feeling well.

The provision of face-to-face lectures and live Zoom streams are contingent on the setup of the classroom and supporting equipment, and the general level of COVID-19 activity in the Hampton Roads area.

If I become uncomfortable with the safety precautions being taken, or feel that the classroom environment and equipment detract from the quality of the course, then I reserve the right to change to a pure web conferencing delivery mode.

Additional notes related to ODU's Spring 2024 semester and COVID-19 may be added to this syllabus nearer to the beginning of the semester.

Textbook and Materials

There is no required textbook, but here is an initial list of recommended books and readings:
* The Elements of Style, by Strunk and White (4th edition)
* Writing for Computer Science, by Justin Zobel
* [How to Read a Paper](https://blizzard.cs.uwaterloo.ca/keshav/home/Papers/data/07/paper-reading.pdf), by S. Keshav
* [Clarity in Technical Reporting] (https://www.cs.odu.edu/~mln/NASA-64-sp7010.pdf), by S. Katzoff, NASA SP-7010
* Harbrace College Handbook, available for checkout at https://archive.org/stream/harbracecollege00hodg

Grading

This is a pass/fail course, meaning that there will be no letter grades assigned. But, as with other courses, to pass this course you need at least a 70%. **This means that to earn a 'P (pass)', you must fully participate in class meetings (or via Zoom if you are online) and complete all class presentations.**

Each student will be tasked with a minimum of two class presentations during the semester. **All presentations must be completed for a 'P' grade.** Online students are expected to meet the same deadlines as in-class students.

Topical coverage (weeks)

|1| Course Intro, Class Trivia
|2| What's Grad School All About?
|3| Academic Presence, Research Careers
|4| Reading Academic Papers
|5| Research Ethics
|6| Academic Communication: Writing about someone else's work
|7| Academic Communication: Presenting
|8| Academic Communication: Writing
[9]   ** Spring Break **
[10]   Academic Communication: Reviewing
[11]   Academic Communication: Publishing
[12]   Seeking funding: Grant Process, Grant Writing|
|13| Student Presentations
|14| Student Presentations
|15| Student Presentations

Course Policies

Email

Each student must check the class Canvas site and email daily. You should use our class Canvas Discussion Board to ask and answer general course-related questions. I will use Canvas Announcements to notify you about important updates (assignment deadline changes, office hours cancellations, etc.).

Attendance

In-person students: I expect you to arrive on time for class. Your grade will be affected if you are consistently tardy. Students may leave after 15 minutes if the instructor or a guest lecturer does not arrive in that time.

Online students: It is essential that you regularly stay involved in class activities. This includes attending synchronous class meetings when possible, checking the class Canvas for announcements, and submitting assignments on time. Online students who cannot attend synchronously are expected to have watched the posted videos of the week's in-class meetings before the next week's first meeting. However, students are strongly encouraged to watch the videos on the same day they are posted.

If you miss a class, you are responsible checking the course Blackboard site to find any assignments or notes you may have missed.

If there are days on which the scheduled class meeting time is cancelled due to weather, there may still be assignments made and due. A post will be made to Canvas Announcements whenever the class meeting is cancelled.

Classroom Conduct

Please be respectful of your classmates and instructor by minimizing distractions during class. Cell phones must be turned to silent during class. Laptops must be closed during student presentations.

Make-up Work

Make-ups for graded activities are possible only with a valid written medical or university excuse. It is the student's responsibility to give the instructor the written excuse and to arrange for any makeup work to be done.

Disability Services

In compliance with PL94-142 and more recent federal legislation affirming the rights of disabled individuals, provisions will be made for students with special needs on an individual basis. The student must have been identified as special needs by the university and an appropriate letter must be provided to the course instructor. Provision will be made based upon written guidelines from the University's [Office of Educational Accessibility](http://www.odu.edu/educationalaccessibility). All students are expected to fulfill all course requirements.

Students are encouraged to self-disclose disabilities that have been verified by the Office of Educational Accessibility by providing Accommodation Letters to their instructors early in the semester in order to start receiving accommodations. Accommodations will not be made until the Accommodation Letters are provided to instructors each semester.

Seeking Help

The course Canvas site should be your first reference for questions about the class. If you have questions about course requirements or materials, post questions using the class Canvas Discussion Board. For extra help, attend office hours.

Academic Integrity

Old Dominion University is committed to students' personal and academic success. In order to achieve this vision, students, faculty, and staff work together to create an environment that provides the best opportunity for academic inquiry and learning. All students must be honest and forthright in their academic studies. Your work in this course and classroom behavior must align with the expectations outlined in the Code of Student Conduct, which can be found at https://www.odu.edu/oscai.

The following behaviors along with classroom disruptions violate this policy, corrupt the educational process, and will not be tolerated.

* Cheating: Using unauthorized assistance, materials, study aids, or other information in any academic exercise.
* Plagiarism: Using someone else's language, ideas, or other original material without acknowledging its source in any academic exercise.
* Fabrication: Inventing, altering or falsifying any data, citation or information in any academic exercise.
* Facilitation: Helping another student commit, or attempt to commit, any Academic Integrity violation, or failure to report suspected Academic Integrity violations to a faculty member.

In particular, submitting anything that is not your own work without proper attribution (giving credit to the original author) is plagiarism and is considered to be an academic integrity violation. It is not acceptable to copy source code or written work from any other source (including other students, online resources), unless explicitly allowed in the assignment statement. In cases where using resources such as the Internet is allowed, proper attribution must be given.

Any evidence of an academic integrity violation (cheating) will result in a 0 grade for the assignment/exam, and the incident will be submitted to the Department of Computer Science for further review. Note that academic integrity violations can result in a permanent notation being placed on the student's transcript or even expulsion from the University. Evidence of cheating may include a student being unable to satisfactorily answer questions asked by the instructor about a submitted solution. Cheating includes not only receiving unauthorized assistance, but also giving unauthorized assistance. For class files kept in Unix space, students are expected to use Unix file permission protections (chmod) to keep other students from accessing the files. Failure to adequately protect files may result in a student being held responsible for giving unauthorized assistance, even if not directly aware of it.

Students may still provide legitimate assistance to one another. You are encouraged to form study groups to discuss course topics. Students should avoid discussions of solutions to ongoing assignments and should not, under any circumstances, show or share code solutions for an ongoing assignment.

All students are responsible for knowing the rules. If you are unclear about whether a certain activity is allowed or not, please contact the instructor.

More information on academic integrity is available on the ODU-CS [academic integrity page](https://weiglemc.github.io/academic-integrity/).

ODU Cares

[Student Outreach & Support (SOS)](https://www.odu.edu/life/dean-students/student-outreach) is a service within the Dean of Students' office. SOS provides support to students who experience administrative, academic, or personal roadblocks. SOS works collaboratively with ODU's Care Team, and is here to help students achieve their personal and academic goals. To access these resources, email oducares@odu.edu.

Statement from ODU Counseling Services

ODU's [Office of Counseling Services](http://www.odu.edu/counselingservices) (OCS, 1526 Webb University Center) is a university agency with competent, diverse, and multidisciplinary professional staff. We are committed to supporting the emotional well-being, social development, and academic progress of all students at Old Dominion University.

College life can be a wonderful time of self-discovery, but for many, it is also a time when the awareness of mental health conditions increases. OCS services are available to assist with addressing mental health concerns that a student may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via our website at http://www.odu.edu/counselingservices. All services are free to ODU students.