MSCS Research Seminar

SYLLABUS AND SCHEDULE | Fall Quarter 2024

Welcome to CPSC5890

I am excited to work with you in Research Seminar and I look forward to your participation in this course. I hope to support, adapt where needed, and encourage your learning. My goal is to support you in achieving your goals related to studying and pursuing your degree and continuing forward to future endeavors. Please feel free to contact me to discuss any concerns you personally have with your learning and participation in class.

Course description/rationale

This seminar explores state-of-the-art technology advances in a selected theme in computer science (Fall 2024 theme: Robotic computing and AI in robotics). You will read papers and give technical presentations on current topics within the theme. The purpose of the course is to expose you to a range of current research topics in computer science and related fields. Another goal is for you to strengthen your written and oral communication skills.

Your learning is my primary concern in this course, so I may modify the schedule if, for instance, we discover we need to spend time on one certain topic and less on another.

Course information

Course code:	CPSC 5890-01
Credits:	3
Time:	Monday: 6 – 8:40pm
Location:	Pigott 106
First session:	9/30/2024
Last session:	12/9/2024
Final Exam:	Presentations Day No Exam

Instructor information

Instructor:	Lisa Milkowski, Ph.D.
Phone:	(206)296-5564
Email:	lmilkowski@seattleu.edu
Office:	SINE 210-02
Online office:	Zoom Personal Meeting ID 838-960-4060
Office hours**:	Monday 4:30 – 5:20pm SINE210 Thurs 2pm – 2:50pm Zoom *Virtually Zoom 8389604060

** (or) Please email to arrange appointments outside office hours if you have conflicts with these times and would like to meet in-person or virtually.

Email:
I will check my email regularly and reply daily. You can email me at any time, but you **may not** receive a response within a few hours. Generally, emails received will receive a response within the following business day. Business days are Monday–Friday, except for holidays.

Office hours (Student hours):
These are a chance for you to meet with me one-on-one or in small groups to discuss the course, your learning, your plans for the future, or just to check in. Office hours can be in person or via Zoom. See Canvas for more details on scheduled times. If virtual I will set up a waiting room to ensure you receive my full attention and to maintain your privacy.

Borrow Chromebook or Internet Hotspot:
If you are having difficulty because your laptop is older or your internet access is patchy, the Library is currently loaning out Chromebooks and internet hotspots. You can submit a request by emailing the Library; follow the link under "Technology Lending"
at: https://libguides.seattleu.edu/technology#s-lg-box-23259286

Learning outcomes

On successful completion of this course, you will be able to:

1. Understand how to critically read academic papers in Computer Science in order to understand and communicate content and technical and non-technical arguments.
2. Prepare and deliver a presentation demonstrating understanding of a paper, new tool, or new technology.
3. Conduct a literature review and write a review report.
4. Work in a group to assimilate and communicate technical content.

Textbook

There is no textbook for this course, but you will be reading many technical papers available through the SU library. Databases available through the library include IEEE Explore https://ieeexplore-ieee-org.proxy.seattleu.edu/Xplore/home.jsp and ACM Digital Library https://dl-acm-org.proxy.seattleu.edu/ and others.

Grading***

Literature Review:	
Team Research Presentation Pitch	5%
Team Research Progress Report	10%
Team Research Final Report & Presentation	50% = 2 x 25%
Published Research Paper Presentation	10%
Participation in class discussion	25%

*** You are required to earn a B- or higher in this course. This is stated in the Seattle University Graduate Academic Catalog. "For students selecting the course option, satisfactory performance (B- or better) in CPSC 5890 is required."

FORMATTING AND SUBMITTING YOUR ASSIGNMENTS

It is important that your work is clearly presented and easy to read. Equally, your efforts should be focused on the content, not the layout, so you must present your work as follows.

HOW?	WHY?
Upload to Canvas	… because it's easier and eco-friendlier than printing it out, and more reliable than emailing. Be sure to upload your assignments as an attachment – and *always* keep a copy.
Upload as a PDF	… because that's the simplest format for me to be able to access, read, and make comments using a stylus.
Use 11 point Arial or Calibri (for PC) or 11 point Helvetica (for Mac) font	… because sans serif fonts like Arial and Helvetica are easier to read on screen than serif fonts (e.g., Times New Roman), particularly for people with visual impairment.
Left-align all text	… because left-aligned text is easier to read since the spaces between the words are equal. Justified text (where both margins are squared) has uneven spaces that can cause reading problems, especially for people with visual impairment or with dyslexia.
Double-space all text	… because this leaves room for people (including you) to add notes and make corrections.
Use black for all text	… because this is easier to read.

BIBLIOGRAPHY/REFERENCES AND CITATION REQUIREMENTS

All your in-text citations and your list of references must follow a style guide such as the IEEE Format (https://www.ieee.org/conferences/publishing/templates.html) or *APA Publication Manual* (7th edition) since these are the standard referencing systems for this discipline. It may be different from other systems you have used, so if you use it; follow IEEE Templates or Manual's citation guidelines carefully. This is an opportunity to demonstrate your attention to detail.

To help you, you can use **Purdue University's Online Writing Lab (OWL)** pages on APA, and if you're having difficulty, arrange to meet with me and we can go over any trouble spots together.

- All citations are to be hyperlinks. The hyperlinks will be a direct link to the citation and paper as shown in the SU library or free listing of the paper online.
- All sources used should be cited, including those you read for info, quoted, or paraphrased from.
- Use APA 7th edition rules to format your citations.
- **This citation generator supports APA 7 web article citations well**
  https://www.scribbr.com/citation/generator/Links to an external site.

APA 7 guidance and examples link:
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/index.html

- Change from APA 6: APA 7 no longer requires the "Retrieved date from" for web citations any more
- https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_electronic_sources.

Academic resources

My goal is to create a learning environment in which you can be incredibly successful. I will work hard to create and improve the learning environment throughout the quarter based on my own observations of the course and your feedback on what would help you learn more. In return, I ask and encourage you to make the most of this learning opportunity. Please take advantage of the academic support services available to you at the university. Even if you have had excellent study skills in the past, it is easy to slip into suboptimal habits and these services can help you excel in your studies.

LIBRARY AND LEARNING COMMONS

http://www.seattleu.edu/learningcommons/

LEARNING ASSISTANCE PROGRAMS

Learning Assistance Programs provide peer tutoring, study groups, and learning strategy development through scheduled workshops and individual meetings with a learning specialist.

ACADEMIC INTEGRITY TUTORIAL

https://www.seattleu.edu/academic-integrity/resources-for-students/

1) All work is required to be completed by the individual, unless EXPLICITLY noted otherwise. Use of AI text generation aides is prohibited.
2) Academic Integrity violations will be treated seriously.
3) Code samples from other sources (online, books, friends) may NOT be used without EXPLICIT permission to do so. If you reuse other code, even with modifications, you must acquire permission AND cite the source properly.
**Submitted assignments are expected to be your own work. Solutions or partial solutions found online are not acceptable. Remember, if you can find code online, so can your instructor!

General course and university policies

SUPPORT FOR STUDENTS WITH DISABILITIES

If you have, or think you may have, a disability (including an “invisible disability” such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to arrange support services and/or accommodations through Disability Services staff located in Loyola 100, (206) 296-5740. Disability-based adjustments to course expectations can be arranged only through this process.

If you expect to take your exams through Disabilities Services, specific exam arrangements should be made at least one week in advance of the posted exam date.

NOTICE ON RELIGIOUS ACCOMMODATIONS

It is the policy of Seattle University to reasonably accommodate students who, due to the observance of religious holidays, expect to be absent or endure a significant hardship during certain days of their academic course or program. Please see, Policy on Religious Accommodations for Students (https://www.seattleu.edu/media/policies/Policy-onReligious-Accommodations-for-Students---FINAL.PDF).

DIVERSITY AND INCLUSION EXPECTATIONS

Seattle University has a stated commitment to diversity and inclusivity. In part, this includes an expectation that all members of our campus community treat one another with respect and care in the classroom. Actions or statements which espouse the supremacy of one group of people over another, or which marginalize any group, are not welcome in our classroom. Such attitudes are destructive to both our learning process and our community. All students in this course are welcomed and valued.

Racism, sexism, homophobia, transphobia, and other forms of discrimination have no place on our campus or in our classroom. Our class, like our campus, is one community. We teach all students, regardless of background or beliefs. All students are equally welcome and valued. Growth mindset includes our ability to grow together, to learn to be more tolerant, and to become more compassionate.

If you find that anything in our class is failing to live up to these principles (including me), I encourage you to bring this issue up using any of the following methods:

- Reporting the issue through the Office of Institutional Equity (https://www.seattleu.edu/equity/reporting/ (Links to an external site.))
- Contacting me
- Contacting the department chair
- Contacting any faculty / staff member you feel comfortable talking to; possibly your academic advisor.

Additional resources are available at the Office of Diversity and Inclusion (https://www.seattleu.edu/diversity/resources (Links to an external site.)).

Health and safety protocols (in-person)

In this class, as elsewhere on campus, all of us—students and faculty—must comply with all Seattle University health and safety protocols.

MISSED CLASSES

Due to the interactive nature of the class, I consider attendance to be mandatory. Of course, an occasional absence is to be expected. If you need to miss a class, please contact me ahead of time.

CELL PHONES, LAPTOPS, AND RECORDING DEVICES

So that we can all stay focused and get the most from our time in class, all cell phones – including my own – must be turned off except by prior agreement. (For instance, if you're the primary caregiver for someone, a relative or close friend of someone who's critically ill in hospital, or an expectant birth partner, please let me know so that we can make a suitable arrangement.)

There will be a few opportunities during class to use your laptops and I will let you know when these occur. If you want to use a laptop, mobile device, or recording device in class at any other time, you need to ask for permission in advance. There are very few instances where I will agree (such as accommodation from Disability Services), and there are good reasons for this:

- Good note-taking skills are vital for you in your future careers: You can't always rely on technology being available, can't expect to be given prepared summaries or notes, nor can you afford the time to write everything long-hand. It's important that when you graduate, you have some good note-taking techniques and can differentiate essential facts from background information during a discussion. We will also discuss this in class.
- Using laptops can be a distraction, both for other students and for the instructor. The temptation to attempt to "multi-task" using technology in class can also be enormous, but to do so would be extremely discourteous to the entire class and would be a waste of your own learning opportunity.
- Recording devices can make individuals feel less free to express themselves and can therefore constrain discussion.

Please be respectful of other students' time and commitment to their studies by not breaching this policy so that we don't end up in the embarrassing position of having to ask you to leave the class. If your phone does accidentally go off, I expect you to turn it off immediately, and not to answer the call.

CLASS RECORDING

If meeting virtually, Zoom meetings of this course may be recorded. Any recordings will only be available to students registered for this class. Recordings may not be reproduced, shared with those not in the class, or uploaded to other online environments.

ACADEMIC POLICIES ON THE REGISTRAR WEBSITE

https://www.seattleu.edu/redhawk-axis/academic-policies/

Be sure that you understand the following university academic policies, posted on the Registrar's website:

ACADEMIC INTEGRITY POLICY
ACADEMIC GRADING GRIEVANCE POLICY

Grading procedures and policies

ATTENDANCE AND PARTICIPATION EXPECTATIONS

Numerous research studies have shown that when students actively ask and answer questions, they take greater interest in the material, they clarify shared misconceptions, and they retain more information. I would like to see all of you actively participating in the learning process and small-group work. At a minimum, active participation requires regular and attentive class attendance. I will not take formal daily attendance, but if you are regularly absent or if you regularly appear to be inattentive in class, it will concern me. If attendance or attentiveness become a continuing problem, then please note: research studies indicate that this will negatively affect your grade.

GRADING SCALE

Please remember that at the university level, an A is *exceptional* and a B is *good*.

A	100 –93	Superior	B–	82.99–80	D+	69.99–67	
A–	92.99–90		C+	79.99–77	D	66.99–63	Poor
B+	89.99–87		C	76.99–73	Adequate	D–	62.99–60	
B	86.99–83	Good	C–	72.99–70	F	59.99 - 0	Failing

SUBMITTING YOUR ASSIGNMENTS

Your presentations and blogs must be submitted on Canvas.

Student responsibilities for learning

In this class, you are expected to conduct yourselves as professional, courteous, and well-organized individuals – this is what any organization will expect of you when you complete your degrees. Acting in this way helps give Seattle University graduates a reputation as excellent and reliable colleagues, and in turn it means that your degree is worth more in a competitive marketplace. One of the most important ways you will demonstrate these behaviors in class is by ensuring that your work is ALWAYS ON TIME.

You can expect to devote an average of three hours outside of class to the subject matter for every hour in class. As this is a three-credit class, you can reasonably expect an average of 9 hours of homework each week. For a virtual class that would be 12 hours of course work each week. I have tried to ensure that the workload is evenly distributed throughout the course but depending on individual days of presentations word load can vary.

Provisional schedule

WEEK & DATES		
Week#1 9/30	TOPICS	Introduction and Review of One paper
Week#2 10/7	TOPICS:	Presentations of Published Research ‘Survey’ papers
Week#3 10/14	TOPICS:	**Team Research Pitch Night**
Week#4 10/21	TOPICS:	Presentations of Published Research ‘Survey’ papers
Week#5 10/28	TOPICS:	**Team Research Progress Presentations**
Week#6 11/4	TOPICS:	**Team Research Progress Presentations**
Week#7 11/11	TOPICS:	NO CLASS; HOLIDAY
Week#8 11/18	TOPICS:	Published Research Paper Presentations
Week#9 11/25	TOPICS:	Published Research Paper Presentations
Week#10 12/2	TOPICS:	**Team Final Research Presentations**
Finals 12/9	TOPICS:	**Team Final Research Presentations** PRESENTATIONS INSTEAD OF FINAL