CSCI 8901: Research and Evaluation Methods EMSE 8000: Research Formulation in EMSE

Spring 2024
Thursdays 12:45 – 3:15 p.m.
Location: TOMP 309

Note: This semester, these CSCI and EMSE courses are cross listed. Many of the lectures will be joint, since an important goal is to facilitate cross-disciplinary appreciation and collaboration, but some of the material will be course/discipline specific. So, please make sure you are registered for the correct version for your major and follow that version.

Instructor: CSCI 8901: Prof. Timothy Wood

timwood@gwu.edu (please incl. CSCI 8901 in the subject line)

EMSE 8000: Prof. David Broniatowski

broniatowski@gwu.edu (please incl. EMSE 8000 in the subject line)

Office Hours: To be scheduled during the first class session

Website: We will be using the Blackboard site to post course materials.

Prerequisites: None; though, this course is restricted to CS and EMSE doctoral students.

Policy on in-person participation/recording: This is an in-person course and lectures will not be recorded. If you need to miss specific classes for justified reasons, accommodations will be made as feasible. Please work directly with the instructor with as much notice

as possible.

Bulletin Course Description:

CSCI 8901: The scientific method; research/design requirements and objectives: qualitative, quantitative, and case studies; performance metrics; design procedures and control; sources of error and bias; evaluation tools; formal validation methods; documentation standards. Restricted to CSCI PhD students.

EMSE 8000: First in a two-course sequence of doctoral seminars designed to give students their first exposure to the process of formulating and executing empirical research. Class format includes discussion, field experiments, data analysis, and theorizing. Study of core concepts in building theory from empirical data and classic works in technically-oriented management theory. Participants design and execute a research project. Restricted to EMSE PhD students.

Additional Course Description

This is a doctoral seminar designed to give students their first exposure to the process of formulating and executing doctoral level research, and especially literature review. This is a seminar style course, and a

high level of in-class participation is expected. The emphasis in this course will be on formulating a research question and positioning it within the literature, but we will also cover core concepts along the whole research value chain. Peer feedback will be emphasized throughout.

Learning Outcomes:

By the end of the course, students will be able to:

- 1. Position their research in the literature.
- 2. Engage in a scholarly discussion about the design and implementation of research and experimental designs
- 3. Compare and contrast the appropriateness of different research designs for answering different types of questions.
- 4. Design, execute, and critique research.
- 5. Effectively present research in writing and oral presentations.
- 6. Identify and review relevant literature
- 7. Provide constructive peer feedback.

Independent Learning

This is a 3-credit course, which includes 2.5 hours of class time each week. You should expect to spend a minimum of 5 hours of independent learning time per week, outside of class time, in reviewing and working on materials for this course. More information about GW's credit hour policy can be found at: https://provost.gwu.edu/policies-procedures-and-guidelines.

Required Text(s) and Reading Materials

There is no required textbook for this course. However, we will consistently reference three forms of source material:

- 1. Course notes, in the form of PowerPoint slides
- 2. Notes you take based on in-class discussion
- 3. Conference/Journal papers and online books specified in the syllabus below.

Course Schedule, Assignments and Readings:

The below table provides an overview of the course schedule, assignment, due dates and readings. More detailed descriptions for each category follow.

#	Торіс	Date	Assignment
1	Intro to the Class and the PhD	18-Jan	Your intro slides
2	How to Critique a Paper	25-Jan	FAQ and Paper Review 1
3	Peer Review (starts at 2pm)	1-Feb	Read paper in your area
4	Design of Research	8-Feb	Paper Review 2
5	Research Questions	15-Feb	Brainstorm research questions
6	Literature Reviews	22-Feb	List of papers for Lit Review
7	PhD Therapy	29-Feb	Determine relevancy of Lit Review List
8	Research Questions Revisited	7-Mar	Annotated Paper List (due week 9)
Spring Break			
9	How to Synthesize Literature	21-Mar	
10	Student Driven Topic	28-Mar	List of depth papers
11	Student Driven Topic	4-Apr	Lit Review Checkpoint due
12	Student Driven Topic	11-Apr	
13	Student Driven Topic	18-Apr	
14	Summary / Wrap up	25-Apr	Full Lit Review due

Assignments:

The main deliverable for this course is a literature review that we hope can evolve into chapters of your dissertation proposal. You will develop this document in stages.

Grade breakdown:

20% Class participation

• All students are expected to actively engage in the classroom discussions

30% Weekly assignments

• These assignments will be graded as Check plus (100%), Check (90%), Check minus (75%)

50% Literature Review

- 10% Annotated Paper List
- 10% Lit Review Checkpoint
- 30% Final Lit Review

Policy on late submissions

All assignments must be uploaded to blackboard before the date/time they are due. A penalty of 5% per day will be deducted from late submissions. Assignments will not be graded if they are more than one week late. Extenuating circumstances will be considered. Requests for consideration should be made in writing, by email.

Use of Electronic Course Materials

Students are encouraged to use electronic course materials for private personal use in connection with their academic program of study. Electronic course materials should not be shared or used for non-course related purposes unless express permission has been granted by the instructor. Students who impermissibly share any electronic course materials are subject to discipline under the Student Code of Conduct. Please contact the instructor if you have questions regarding what constitutes permissible or impermissible use of electronic course materials and/or recorded class sessions. Please contact Disability Support Services if you have questions or need assistance in accessing electronic course materials.

Academic integrity

Academic Integrity is an integral part of the educational process, and GW takes these matters very seriously. Violations of academic integrity occur when students fail to cite research sources properly, engage in unauthorized collaboration, falsify data, and in other ways outlined in the Code of Academic Integrity. Students accused of academic integrity violations should contact the Office of Academic Integrity to learn more about their rights and options in the process. Outcomes can range from failure of assignment to expulsion from the University, including a transcript notation. The Office of Academic Integrity maintains a permanent record of the violation.

More information is available from the Office of Academic Integrity at studentconduct.gwu.edu/academic-integrity. The University's "Guide of Academic Integrity in Online Learning Environments" is available at studentconduct.gwu.edu/guide-academic-integrity-online-learning-environments. Contact information: rights@gwu.edu or 202-994-6757.

The number one problem that students run into with regards to academic integrity is plagiarism. It is not okay to copy, use, or otherwise exploit other people's ideas, words, or creations without giving them credit in the proper form. Sometimes this means you must use quotation marks; while other times a simple source citation will do the trick. Changing a few words in a paraphrase is not enough to turn source material into "your own words" – in fact, that's a really bad idea to even try. Changing the phrasing order of sentences is not okay and using the thesaurus to find ways to change "happy" to "glad" is also a very bad idea. It is expected that students know how to correctly quote and cite material, and also how to write well. For those students who need assistance, the GWU Writing Center is available. Please see: http://www.gwu.edu/~gwriter/ or https://writingcenter.gwu.edu/

University policy on observance of religious holidays

In accordance with University policy, students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. For details and policy, see "Religious Holidays" at provost.gwu.edu/policies-procedures-and-guidelines

Support for students outside the classroom

Virtual academic support

A full range of academic support is offered virtually in spring 2021. See <u>coronavirus.gwu.edu/top-faqs</u> for updates.

Tutoring and course review sessions are offered through Academic Commons in an online format. See academiccommons.gwu.edu/tutoring

Writing and research consultations are available online. See academiccommons.gwu.edu/writing-research-help

Coaching, offered through the Office of Student Success, is available in a virtual format. See studentsuccess.gwu.edu/academic-program-support

Academic Commons offers several short videos addressing different virtual learning strategies for the unique circumstances of the fall 2020 semester. See <u>academiccommons.gwu.edu/study-skills</u>. They also offer a variety of live virtual workshops to equip students with the tools they need to succeed in a virtual environment. See <u>tinyurl.com/gw-virtual-learning</u>

Writing Center

GW's Writing Center cultivates confident writers in the University community by facilitating collaborative, critical, and inclusive conversations at all stages of the writing process. Working alongside peer mentors, writers develop strategies to write independently in academic and public settings. Appointments can be booked online. See gwu.mywconline.

Academic Commons

Academic Commons provides tutoring and other academic support resources to students in many courses. Students can schedule virtual one-on-one appointments or attend virtual drop-in sessions. Students may schedule an appointment, review the tutoring schedule, access other academic support resources, or obtain assistance at academiccommons.gwu.edu.

Disability Support Services (DSS) 202-994-8250

Any student who may need an accommodation based on the potential impact of a disability should contact Disability Support Services to establish eligibility and to coordinate reasonable accommodations. disabilitysupport.gwu.edu

Counseling and Psychological Services 202-994-5300

GW's Colonial Health Center offers counseling and psychological services, supporting mental health and personal development by collaborating directly with students to overcome challenges and difficulties that may interfere with academic, emotional, and personal success.

healthcenter.gwu.edu/counseling-and-psychological-services

Safety and Security

- In an emergency: call GWPD 202-994-6111 or 911
- For situation-specific actions: review the Emergency Response Handbook at safety.gwu.edu/emergency-response-handbook
- In an active violence situation: Get Out, Hide Out, or Take Out. See go.gwu.edu/shooterpret
- Stay informed: safety.gwu.edu/stay-informed