

**UNIVERSITY OF MICHIGAN
SCHOOL OF MEDICINE
DEPARTMENT OF LEARNING HEALTH SCIENCES**

**Health Infrastructures Pro-Seminar II
LHS 750
Winter 2024**

CREDIT HOURS	2
PRE-REQUISITES	LHS 650, Graduate standing or permission of the instructor
CLASS SCHEDULE	Wednesdays 1-3:00 pm
LOCATION	5340 Taubman Health Sciences Library <u>Zoom link for special needs:</u> https://umich.zoom.us/j/93613242845 ; (passcode 750)
FACULTY	Profs. Charles Friedman, Alexandra Vinson, and Rachel Richesson Department of Learning Health Sciences University of Michigan Medical School Email: LHS750Instructors@umich.edu NOTE: Use [LHS750] in subject line of all course-related messages Faculty office hours: By appointment

OVERVIEW

Health infrastructures connect networks of people, organizations, and technologies at multiple levels of scale in physical and virtual spaces to improve the health of individuals and populations. This seminar examines theory and applied case studies to explore infrastructural thinking in the context of learning health systems, with an emphasis on the role of data and data standards.

COURSE DESCRIPTION

This course provides theoretical and practical perspectives on the evolution of major infrastructures, focusing in particular on health and information infrastructures. The course begins by examining learning health systems as potential infrastructures that emerge, evolve, and decay in the context of social systems. Students gain fluency in the language of infrastructure as a technological and social phenomenon linking people, processes, policy, and technology. The course focuses on the organization of health as a problem of infrastructure and considers how this perspective might inform research, practice, and the capacity for change.

This is a seminar style course focused on assisting students to enter the dissertation phase of their graduate education. There will be several sessions dedicated to content around LHS infrastructure. Other sessions will be designed to help understand various structures and approaches to the literature review. Students will be expected to lead discussion of course readings and presentation of their evolving HILS PhD literature review approach and outline.

COURSE OBJECTIVES

By completion of the course students will be able to:

1. Synthesize LHS literature and describe relationship of LHS infrastructure to their emerging dissertation topic.

2. Describe the different approaches to conducting a literature review.
3. Explain what “socio” means in the context of infrastructure and analyze infrastructure in terms of its relationship to culture.
4. Describe LHS infrastructure in terms of interconnected socio-technical services and identify indicators of LHS infrastructure maturity.
5. Articulate the role of data in learning health systems (LHS), and describe how data standards and data quality can impact LHS activities, including the generation and dissemination of knowledge.
6. Develop an outline of their literature review.

COURSE COMMUNICATIONS: We will not be using a Canvas site for this small seminar course and will rely on email for communication. We have established an email address that will reach all three faculty members: LHS750Instructors@umich.edu. It is very important that you put “[LHS750]” into the subject line of all messages to this address, so the faculty will be sure to attend to them. We will also establish an “LHS750students” email list once the class enrollment is finalized.

This is a residential class and students are expected to attend in person. Faculty and students who are out of town and wish to attend remotely may use the web link on Page 1. Advance notice of this is required. Otherwise the web link will not be opened.

SESSION TOPICS

The schedule of topics by week is appended below.

SESSION FORMATS

This course will be taught as a pro-seminar and will include both faculty- and student-led discussions and student assignments to be completed individually. Required preparation for each session is indicated in the topic schedule document. Sessions are intended to be flexible, open, and informal. LHS 750 is the HILS Capstone Seminar for PhD students. We have designed this course to support you as you conceptualize and begin writing your literature reviews. However, the success of this course is dependent on your preparation and active participation. Please come to class prepared to engage with the discussion topics and to support your classmates as they conceptualize their literature reviews. To facilitate your preparation, you may be asked to prepare an assignment or presentation, to submit discussion questions in advance, or be chosen at random to lead the seminar discussion. Assignments and readings are included on the schedule of topics and any changes will be announced a week in advance.

REQUIRED TEXTS AND READINGS

There is no required textbook for this course. Readings will be announced by email.

It is critically important that you do the readings and come prepared to ask questions and/or lead discussions. You should expect to take notes on the assigned reading, to prepare discussion questions in advance, and arrive to seminar prepared to lead a discussion. Suggested readings are suggested but not required. Students may suggest topics and readings to be added to the list throughout the course of the semester.

GRADING AND ASSIGNMENTS

Grading

Grades in the course will be based on:

1. The literature review approach presentation
2. The reflective writing assignment
3. The literature review outline

4. Attendance

Items 1-3 are described below.

Students will receive detailed faculty and peer feedback on Items 1-3. Each will be graded "completed/not completed" by the faculty. "Completion" will be determined by faculty assessment of the quality of work expected of students who have completed two years of PhD education. Students whose work does not meet this standard will be asked to revise it.

Regular attendance is an absolute requirement; satisfactory completion of the requires that a student miss no more than two scheduled sessions over the course of the semester. If extraordinary circumstances require a student to miss more than two sessions, this must be discussed with the course faculty. Students who miss more than two sessions will be required to complete remedial assignments on the topics of the missed sessions. Students missing a session due to illness will be excused as long as they notify the faculty in advance of the session.

Students receiving "completed" grades on Items 1-3, and who meet the attendance requirement, will receive the grade of A for the course. Students that fail to satisfactorily complete required assignments to the satisfaction of the instructors will receive a lower grade or incomplete, at the discretion of the course instructor of record.

Graded Assignments

1. Presentation of HILS Literature Review Approach

This is a two-part assignment. For the first part of this assignment, please think about the approach you will use for your Lit Review, including applicable search methods and interpretation processes. Please make one PowerPoint slide that gives an overview of your topic and approach. Due date: you will present this slide in class on January 24th.

Part 2: After you receive feedback on your slide in class, please revise your slide and turn it in to Drs. Richesson, Friedman and Vinson by January 31st. If you choose, you may submit a paragraph-long description of your topic and approach in lieu of a revised slide.

Reflective Writing Assignment

Several weeks of the seminar will be devoted to discussions of LHS-relevant topics selected by Drs. Richesson, Friedman and Vinson. The goal of these sessions is to help you think about how your literature review topics, and eventual dissertations, contribute to the field of Learning Health Sciences. After these sessions conclude, we would like you to write a short paper that puts one or more of the topics in conversation with your literature review topic. This paper should be 4-6 pages long and is due on March 20th, 2024.

3. Literature Review Outline

This final assignment for this course is twofold:

1. Submit an outline of your literature review. If you have sections of the literature review drafted, you may also submit them for developmental feedback. If you choose this option, please consult with the instructors to make sure that you are ready for feedback on your written work.
 2. Submit a self-assessment of your progress in the course (500-1000 words)
- Both parts of the final assignment should be submitted together. They are due no later than noon Eastern time on April 26, 2024.

Summary of Assignments and Due Dates

Assignment	Due Date
Presentation of Literature Review Topic & Approach	January 24
Revise Lit Review Topic/Approach Slide <i>Taking the feedback you received during class on January 24, revise your slide and turn it in to Drs. Richesson, Friedman and Vinson (LHS750Instructors@umich.edu) on January 31. You may submit a revised slide or convert your description of your literature review topic and approach to a written paragraph.</i>	January 31
Reflective Writing Assignment	March 20
Presentation and Self-Assessment of Progress <i>Each student will choose a presentation date and prepare a 30-minute presentation</i>	March 27 April 3 April 10
Final Assignment	April 26

COURSE POLICIES

DLHS Grade Grievance Policy

Regular feedback on graded assignments and timely resolution of any grading concerns is helpful for student learning and overall positive experience. Students are encouraged to discuss any assignment grade concerns with the instructor(s) within two weeks of the grades being posted on Canvas. Similarly, any concerns and grievances related to the overall course grades should be raised by contacting the faculty of record within two weeks of the course grades being posted on Wolverine Access.

For this course, the grade dispute arbitration will happen within the Department of Learning Health Sciences (DLHS). After initial discussion with the faculty of record for the course, there is an opportunity for a second look by another DLHS faculty member with appropriate expertise for resolving grade disputes. If the student and faculty are not able to come to an agreement about the grade dispute, the Associate Chair for Educational Programs or assigned designee will adjudicate the dispute. Per Rackham's Academic Dispute Resolution Process, if the concern is not resolved, the student may seek a formal resolution conference with the Medical School's Rackham Resolution Officer (see <https://rackham.umich.edu/academic-policies/section9/> for full policy and the contact information for the current resolution officer).

U-M Health Response

We each have a responsibility for protecting the collective health of our community. Applicable safety measures are described on the U-M Health Response website: <https://healthresponse.umich.edu/> Please bookmark this site for policies, guidance, and FAQs.

Expectations

This is small class; therefore, discussions will be the key to learning during the course. Students should plan to do all readings prior to the assigned class, and to suggest additional readings related to the course topics and their research. Students will also apply concepts to their own research ideas.

Digital Etiquette

Students should turn off ringtones and other audible alerts on their phones/tablets/laptops before class sessions begin, whether in-person or online. The use of phones/tablets/laptops for non-course related activities, such as texting, emailing, and social media is distracting to your classmates and instructors. If there is an emergency, please excuse yourself from the classroom and/or the Zoom meeting to attend to it.

INSTITUTIONAL POLICIES

Academic Integrity of Students

The academic community, like all communities, functions best when its members treat one another with honesty, fairness, respect, and trust. Your instructors expect students to work and study together to foster learning and understanding of the material. However, direct copying of homework, copying of homework from existing solutions, cheating on an exam, and other conduct that violates the academic integrity and ethical standards of the Rackham Graduate School community cannot be tolerated and will result in serious consequences and disciplinary action.

All written submissions must be your own, original work. Original work for narrative questions is not mere paraphrasing of someone else's completed answer: you must not share written answers with each other at all. At most, you should be working from notes you took while participating in a study session. Largely duplicate copies of the same assignment will receive an equal division of the total point score from the one piece of work.

You may incorporate selected excerpts, statements, or phrases from publications by other authors, but they must be clearly marked as quotations and must be attributed. If you build on the ideas of prior authors, you must cite their work. You may obtain copy editing assistance, and you may discuss your ideas with others, but all substantive writing and ideas must be your own or be explicitly attributed to another.

If we suspect you have cheated (including plagiarism), at the very least you will receive a zero on the assignment. Rackham policy dictates that we must report every instance of academic dishonesty, no matter how small. Suspected academic misconduct will be handled by Drs. Piatt and Donnelly.

<https://rackham.umich.edu/academic-policies/section8/>

Student Academic Dispute Procedures

Rackham's Academic Dispute Resolution Policy and Procedures are available to Rackham students who have a dispute or disagreement with faculty or staff about the equity and fairness of decisions or procedures that affect their academic standing, the conduct of their research, and progress toward the degree. Such issues may arise regarding fair and equal treatment in the conduct of a class, in the pursuit of the student's research, and in the grading or evaluation of academic work and research. Other issues may concern the equity and fairness of program, department, or Rackham policies.

<https://rackham.umich.edu/academic-policies/section9/>

Diversity, Equity, and Inclusion

The Department of Learning Health Sciences (DLHS) is committed to developing the institutional mechanisms and norms necessary to promote the values of diversity, equity, and inclusion, both inside and outside our classrooms. To this end, DLHS upholds the expectations that all courses will: (1) be inclusive, (2) promote honest & respectful discussions, (3) follow multicultural ground rules, and (4) abide by UM policies and procedures. Inclusive courses are those in which teachers and learners co-create and co-sustain environments that support and encourage all members to participate equitably.

<https://rackham.umich.edu/rackham-life/diversity-equity-and-inclusion/>

Accessibility and Accommodations

Students should speak with their instructors before or during the first week of classes regarding any special needs. Students seeking academic accommodations should register with Services for Students with Disabilities (SSD). SSD arranges reasonable and appropriate academic accommodations for students with disabilities. Please visit <https://ssd.umich.edu/accommodations> for more information on student accommodations.

Student Parents and Caregivers

If you are a pregnant, parenting student, or primarily responsible for providing care for a loved one or family member, and you need any accommodations, please let the instructor know at your earliest convenience. You may also reach out to mcasp.org and CEW+ for resources and community support.

Student Mental Health and Well-Being

The University of Michigan is committed to advancing the mental health and wellbeing of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact Counseling and Psychological Services (CAPS) at (734) 764-8312 and <https://caps.umich.edu/> during and after hours, on weekends and holidays, or through its counselors physically located in schools on both North and Central Campus. You may also consult University Health Service (UHS) at (734) 764-8320 and <https://uhs.umich.edu/mentalhealthsvcs>, or for alcohol or drug concerns, see <https://uhs.umich.edu/aodprograms>.

For a listing of other mental health resources available on and off campus, visit: <https://caps.umich.edu/article/finding-your-community-provider-database-included>.

Sexual Misconduct/Sexual Harassment Reporting

Title IX prohibits sex discrimination to include sexual misconduct: harassment, domestic and dating violence, sexual assault, and stalking. If you or someone you know has been harassed or assaulted, you can receive confidential support and academic advocacy at the Sexual Assault Prevention and Awareness Center (SAPAC). SAPAC can be contacted on their 24-hour crisis line, 734-936-3333 and online at sapac.umich.edu. Alleged violations can be reported non-confidentially to the Office for Institutional Equity (OIE) at institutional.equity@umich.edu. Reports to law enforcement can be made to University of Michigan Police Department at 734-763-3434.

Support for Food Insecurity

Students across the country experience food insecurity at alarming rates. The Maize and Blue Cupboard at the University of Michigan provides food, kitchen and cooking supplies, personal and household items, and support services. For information about accessing their services, please visit <https://mbc.studentlife.umich.edu/>

Confidentiality and Mandatory Reporting

As instructors, one of our responsibilities is to help create a safe learning environment on our campus. Dr. Piatt also has a mandatory reporting responsibility related to her role as the Director of the Health Infrastructures and Learning Systems degree program. Instructors are required to share information regarding sexual misconduct or information about a crime that may have occurred on U-M's campus with the University. Students may speak to someone confidentially by contacting SAPAC's Crisis Line at (734) 936-3333.

SCHEDULE OF COURSE SESSIONS (Readings will be specified in advance of each class.)

Week	Date	Topic / Presenter	Lead Faculty	Assignment
1	1/10	Introductions Course goals	All	
2	1/17	Literature review overview and process	Vinson, Richesson	
3	1/24	Student presentations of thoughts/approach on literature review	All	Assignment 1, Part 1: Make one slide describing your Lit Review topic and approach. Be prepared to present your slide and receive feedback on 1/24.
4	1/31	What is social about Sociotechnical Systems?	Vinson	Assignment 1, Part 2: Revise your slide about your Lit Review topic and approach based on the feedback you received on 1/24. Submit a revised slide or paragraph-long version of your topic and approach to the faculty for feedback.
5	2/7	Culture as Infrastructure	Vinson	
6	2/14	Infrastructure as Services	Friedman	
7	2/21	Standards as Infrastructure	Richesson	
8	2/28	Winter Break – NO CLASS		
9	3/6	Data Quality as Infrastructure	Richesson	
10	3/13	Maturity Models	Friedman	
11	3/20	NO LIVE CLASS Independent Writing <i>(Students may opt to meet and write on site)</i>		Assignment 2: Reflective Writing Exercise: Write a short paper that puts one or more of the Week 4-10 topics in conversation with your literature review topic. This paper should be 4-6 pages long and is due on March 20 th , 2024.
12	3/27	Two students present self- assessment of progress, including lit review approach and outline	All	

13	4/3	Two students present self-assessment of progress, including lit review approach and outline	All	
14	4/10	Two students present self-assessment of progress, including lit review approach and outline	All	
15	4/17	Course wrap up; writing time if needed	All	Final project or paper due Tues 4/26 (Last day of classes on 4/23)