

University of Florida
College of Public Health & Health Professions Syllabus
PHC 6103 Systems Thinking for Public Health
Summer A 2025

Delivery Format: Asynchronous Online
 Canvas via E-Learning

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 (please email yulias@ufl.edu and provide several days and times you are available)

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PREREQUISITES

Students with graduate-level competency and background in public health, health services, and/or population health management.

Students with graduate-level academic writing and data analytical skills.

REQUIRED TEXTS

Readings will be assigned from the books listed below. Textbook chapters and additional readings will be posted on Canvas.

De Savigny, D., & Adam, T. (Eds.). (2009). *Systems thinking for health systems strengthening*. World Health Organization. **[Available online]**

Meadows, D. H. (2008). *Thinking in systems: A primer*. **[Available online through UF Libraries]**

Kim, D. H. (2000). *Systems thinking tools*. Pegasus Communications. **[Available online]**

PURPOSE AND OUTCOME

Course Overview

The purpose of this course is to expose students to systems thinking theory and methods with a special focus on addressing problems in public health and population health management. This course is designed to facilitate the pivot from analytical thinking and knowledge-based learning to a more emergent and synthetic understanding of how public health problems manifest within complex systems. Multiple systems, structures, processes, and cultures will be considered in the context of a whole situation.

Learning Outcomes

The course is positioned within the curriculum to build on the background and techniques acquired in the first-year graduate healthcare courses and to prepare students for internship and or job placement in a practical working environment.

By the end of the course, the students will gain knowledge and skills aligned with the Systems Thinking *Foundational Public Health* knowledge:

F22: Apply systems thinking tools to visually represent a public health issue in a format other than a standard narrative.

Students will also gain the necessary knowledge and skills for the following *Population Health Management* concentration competency:

PHM1: Integrate systems thinking theory to incorporate multiple stakeholders at state and local levels to address a public health issue.

Pedagogical Approach

This course is founded on a “constructivist” approach that holds that people actively construct or make their own knowledge. In order to prepare students for a future profession in public health, this course utilizes an

“anchored instruction” methodology to allow students to apply these concepts comprehensively to real-world problems.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the [Notification to Students of FERPA Rights](#).

DESCRIPTION OF COURSE CONTENT

Course Structure

This course will consist of six (6) modules corresponding to the 12 classes within the course. Each module contains all learning materials for the given week and presents information through readings, short lectures, public health practice videos, and hands-on assignments. Each module includes a quiz that covers the content presented within the module, including readings and videos.

Announcements

Class announcements will be sent via the announcements tool in eLearning. Depending on your Canvas notification settings, you may or may not be notified via email; **you are responsible for all information in these announcements** whether or not you see them in your email.

Canvas via UF e-learning

This course uses Canvas. The course website is available at <http://elearning.ufl.edu>. The weekly schedule, all modules, and all course materials (including links for quizzes and exams) are available through this website. Grades will be posted on this website, and you will be expected to complete preparatory work and assignments through the website in weekly modules. You will log into the course website using your Gatorlink ID and password; if you have trouble logging in, please contact the UF Help Desk at 352-392-HELP.

Technical Requirements

All students are required to have a webcam and microphone. Browser requirements may change; please consult the UF Helpdesk <https://helpdesk.ufl.edu/> to see a list of supported browsers and recommendations for browser configuration. For technical support for the course eLearning site, activities, and assessments, please contact: the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://elearning.ufl.edu/help.shtml>

Announcements

Class announcements will be sent via the announcements tool eLearning, and students are responsible for all information in these announcements. Note: Canvas does have a feature where you can have all announcements immediately forwarded to your email inbox.

ACADEMIC REQUIREMENTS AND GRADING

Discussions (15%)

This course includes numerous opportunities for students to practice their systems thinking skills. Written discussion posts will provide students with the opportunity to apply course concepts to public health topics and provide peer feedback. To promote peer-to-peer learning and feedback, students will respond to at least two peer posts. The initial posts will be due on the dates indicated in the course schedule, and reactions will be due within two days. Discussions are due by **11:59 p.m. on Thursdays** during Weeks 1, 2, 3, 4, and 6.

Quizzes (20%)

Quizzes are designed to test both the understanding of systems thinking concepts and the ability to apply systems thinking methods to an applied public health problem. Five quizzes will be administered throughout the course and will be open book and open note. Each quiz will include five (5) multiple-choice or short-response questions. Quizzes are due by **11:59 p.m. on Sundays** during Weeks 1, 2, 3, 4, and 6.

Assignments (40%)

Students will complete five assignments that will support the development of their final analysis report. Assignments will cover public health issue selection, review of the policy gaps, issue archetype analysis,

identification of policy options, and the discussion of implications. Assignments are due by **11:59 p.m. on Sundays** during Weeks 1, 2, 3, 4, and 6.

Public Health Policy or Issue Analysis (25%)

Public health issue or policy analysis assignment will allow the students to prepare for the future independent capstone project and practice as population health specialists. Analyses will include an introduction to a public health issue, articulation of a policy need, systems thinking method used to develop policy options and recommendations, and discussion of implications. Reports should be 3,000-3,500 words. The final submission of the analysis is due in Week 5 of the course, **by 11:59 p.m. on June 15**. To allow students sufficient time to work on the analysis, no discussions, quizzes or other assignments will be due during Week 5.

Late Submissions

Late submissions for all assignments will be accepted but will receive a grade penalty. Submissions that are late up to 24 hours will receive a 10% penalty, and submissions that are late by more than 24 hours will receive a 20% penalty.

Grading

Final grades will reflect the students' performance in the following areas:

Requirement	Percent of final grade
Discussions	15%
Quizzes x 5	20%
Assignments x 5	40%
Issue selection	
Policy gaps	
Issue archetype	
Policy Options and Implications	
Stakeholder engagement interview guide	
Public Health Issue or Policy Analysis	25%
TOTAL	100%

Point system used (i.e., how course points translate into letter grades).

Per cent points earned	93-100	90-92.9	87-89.9	83-86.9	80-82.9	77-79.9	73-76.9	70-72.9	67-69.9	63-66.9	60-62.9	Below 60
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.00

Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be at least a 3.0 in all 5000-level courses and above to graduate. A grade of C counts toward a graduate degree only if a sufficient number of credits in courses numbered 5000 or higher have been earned with a B+ or higher. In addition, the Bachelor of Health Science and Bachelor of Public Health Programs do not use C- grades.

More information on UF grading policy may be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

Our online learning community thrives on mutual respect, inclusivity, and open-mindedness. As members of this community, we each bring unique perspectives and experiences, which enrich our collective learning. To maintain a productive and supportive environment:

- **Respect Others:** Treat your peers, instructors, and guest speakers with respect, regardless of differences in opinions, backgrounds, or experiences. Personal attacks, derogatory language, or dismissive behavior will not be tolerated.

- Engage Thoughtfully: Contribute to discussions with an open mind and a willingness to learn. Critique ideas, not individuals, and back your arguments with evidence when possible.
- Be Clear and Concise: Write posts and responses that are easy to understand and free of ambiguity. Proper grammar, spelling, and tone help maintain professionalism.
- Practice Active Listening: Read others' contributions fully and thoughtfully before responding. Acknowledge their points and strive to build on ideas rather than detract.
- Value Diversity: Embrace the diversity of thought, culture, and experiences that each member of our community brings. Assume positive intent and seek clarification when needed.

By adhering to these principles, we create a collaborative, respectful space where all members feel valued and are empowered to contribute to meaningful discussions.

Communication Guidelines

Students will be expected to communicate via official UF email. The preferred methods of communication for the course are messages in Canvas or e-mail. Include PHC 6103 in the subject line of every email for a response within one business day.

Policy Related to Required Class Attendance

Please note that all students and faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar's website for additional details:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Excused Absences

Excused absences must be consistent with university policies in the Graduate Catalog (<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance>) and require appropriate documentation. Additional information can be found here:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Policy Related to Makeup Exams or Other Work

Any requests for make-ups due to technical issues MUST be accompanied by the receipt received from LSS when the problem was reported to them. The receipt will document the time and date of the problem. You MUST e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

All makeup exams due to extenuating circumstances, such as illness, are at the discretion of the professor, and documentation may be required.

Policy Related to Guests Attending Class

Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers. Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester. This is two sessions total across all courses. No further extensions will be granted. Students are responsible for course material regardless of attendance. For additional information, please review the Classroom Guests of Students policy in its entirety. Link to full policy: <http://facstaff.phhp.ufl.edu/services/resourceguide/getstarted.htm>

Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last one or two weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>. Guidance on how to provide constructive feedback is available at <https://gatorevals.aa.ufl.edu/students/>.

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office <http://www.dso.ufl.edu> within the first week of class or as soon as you believe you might be eligible for accommodations. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please do this as soon as possible after you receive the letter. Students with disabilities

should follow this procedure as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>. On line and in person assistance is available.
- You Matter We Care website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
- Crisis intervention is always available 24/7 from:
Alachua County Crisis Center:
(352) 264-6789
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Inclusive Learning Environment

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: www.multicultural.ufl.edu

Recording Class Lectures

"Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons),

including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.”

ACADEMIC INTEGRITY

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

<http://gradschool.ufl.edu/students/introduction.html>

Please remember that cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

COURSE SCHEDULE PHC 6103 *

Module	Topics	Due Dates
Module 1	Systems Thinking in Public Health 1.1 Definition and relevance of systems thinking for public and population health 1.2 History and theory of systems thinking	Discussion #1 due Thu, 5/15/25 Quiz # 1 due Sun, 5/18/25 Assignment #1 (Issue Selection) due Sun, 5/18/25
Module 2	Systems Thinking Vocabulary 2.1 System concepts (boundary, feedback) 2.2 Systems thinking tools (iceberg, mapping)	Discussion #2 due Thu, 5/22/25 Quiz #2 due Sun, 5/25/25 Assignment #2 (Policy Gaps) due Sun, 5/25/25
Module 3	System Causality and Feedback 3.1 Causal loop diagramming 3.2 System archetypes	Discussion #3 due Thu, 5/29/25 Quiz #3 due Sun, 6/01/25 Assignment #3 (Issue Archetype) due Sun, 6/01/25
Module 4	System Interventions 4.1 System interventions and solution archetypes 4.2 Types of leverage	Discussion #4 due Thu, 6/05/25 Quiz #4 due Sun, 6/08/25 Assignment #4 (Policy Options and Implications) due Sun, 6/08/25
Module 5	Cases in Public Health Systems Thinking 5.1 Additional systems thinking methods 5.2 Application of systems thinking to public and population health issues	Public Health Issue or Policy Analysis is due Sun, 6/15/25
Module 6	Stakeholder Engagement 6.1 Group model building, and nominal group technique 6.2 Social systems and networks	Discussion #5 due Thu, 6/19/25 Quiz #5 due Sun, 6/22/25 Assignment #5 (Stakeholder Engagement Interview Guide) due Sun, 6/22/25

* Schedule is subject to change. Students will be notified via email of any changes to the syllabus schedule. For example, assignments may be modified as needed.

** Discussions and assignments are due by 11:59 p.m. on the dates stated in the syllabus

*** Summer A grades are due at noon on Monday 6/23/25

“Instructional materials for this course consist of only those materials specifically reviewed, selected, and assigned by the instructor(s). The instructor(s) is only responsible for these instructional materials.”

SHORT BIBLIOGRAPHY OF SYSTEMS THINKING REFERENCES

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- Herasyomowych, M. & Senko, H. (2004). "Positive" systems archetypes. *Systems Thinker*, 15(5), 6-8.
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- Schoemaker, P. J. (1995). Scenario planning: a tool for strategic thinking. *MIT Sloan Management Review*.
- Sharareh, N., & Wallace, A. S. (2022). Applying a Health Access Framework to Understand and Address Food Insecurity. *Healthcare (Basel, Switzerland)*, 10(2).
- Vensim User Guide. Available at <https://www.vensim.com/documentation/usr04.html>