University of Florida
College of Public Health & Health Professions Syllabus
PHC 6103 Systems Thinking for Public Health
Summer A 2020
Delivery Format: Online

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Prerequisites
Students will have graduate level competency with PowerPoint.
Students will have graduate level narrative writing and data analytical skills.

PURPOSE AND OUTCOME

Course Overview
The purpose of this course is to expose students to systems thinking and complexity theory with a special focus on addressing problems in public health and public health management. See detailed explanation of course content below.

Purpose of this Course
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 background and techniques acquired in first year graduate healthcare courses and to prepare students for internship and or job placement in a practical working environment.

Educational Theories
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 for students to apply these concepts comprehensively real world problems.

Course Structure
This course will be delivered in online format and will consist of modules corresponding to the 12 weeks within the course. Each module contains all learning materials for the given week. The modules will open at 12:00 AM on Monday for each corresponding week and all material is due by 11:59PM on the following Sunday.

Instructional Methods
Required readings, recorded lecture videos, individual exercises, digitally hosted live discussions, digital presentations of case studies, and an individual project with iterative instructor feedback.

DESCRIPTION OF COURSE CONTENT

Course Structure
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Instructional Methods
Required readings, recorded lecture videos, team assignments, individual self-assessments, and digitally hosted live discussions, and a final group project with iterative instructor feedback.

Required Texts
THINKING IN SYSTEMS, ISBN: 9781603580557, DONELLA H MEADOWS
HEALTH SYSTEMS THINKING: A PRIMER, ISBN: 9781284167146 , JOHNSON, ANDERSON, ROSSOW

Technical Requirements
All students are required to have a webcam and microphone. Browser requirements may change; please consult https://kb.helpdesk.ufl.edu/FAQs/SupportedBrowsersForUFWebsites 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.

Lecture and Reading Quizzes
Reading and lecture material has been cultivated to provide a comprehensive understanding of Systems Thinking and how it can be implemented in real world public health practice. In order to verify that students are engaging with material, a lecture and reading quiz is required for each module to verify that content was consumed.

ACADEMIC REQUIREMENTS AND GRADING

Exam on Theory
Multiple choice, short answer, essay. All theory material in modules 1 through 5 is covered. The test is designed to test both understanding of system thinking concepts as well as the ability to synthesize the material to address typical situations.

Final Presentation
Each team will present a set of recommendations on a pertinent topic in Public Health to a given agency using Systems Thinking approaches. The recommendations within the presentation will build on the team assignments

and reflect integration of Systems Thinking Theory as well as previous courses in the MPH program. This presentation will be graded on how it provides an integrative and evidence based approach for real world stakeholders.

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Homework Assignments
The exercises are chances to think about how you apply the material in your expected professional context and interest area. The intention is that the student have a dedicated regular space to think creatively about the material and how it can be applied in practice. These assignments are designed to be informal, brief, and to the point. They will be up to 2 pages in length.

Self-Reflections

Students will conduct self-assessment based on different content, including Peter Senge's lessons from the "Fifth Discipline." Each student will submit a 250-1000 word reflection that is designed for the student to integrate how to integrate systems and organizational theories into their own context. These assignments are not graded for perfection or content, but that "mental sweat" was applied and a genuine effort was applied to reflect on their own experience.

Submission Format
All submissions will use 12-point Calibri, Arial, Times Roman, or other similar font, 1-inch margins, and double spacing.

All submissions should follow as best as possible the APA 7th Edition guidelines for structure of manuscripts, in-text citations, and references. While formatting is not factored into the grading, this is designed to provide helpful structure for students and the instructor. Any and all helpful information for using APA 7th (and others) at the Purdue Online Writing Lab.
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html

Grading
Final grades will reflect your performance in these areas:

Requirement		**Percent of Grade**
Final Presentation	Team Case Study	30
Mid-Term Exam	Exam on Theory	30
Participation	Homework Assignments	10
	Self-Assessments	10
	Reading and Lecture Quizzes	15
	Peer Evaluation	05
Total percentage		100

Points earned	93-100	90-92.99	87-89.99	83-86.99	80-82.99	77-79.99	73-76.99	70-72.99	67-69.99	63-66.99	60-62.99	Below 60.99
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

There will be no rounding up for grade increments, for example a 92.99 is an A-
Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be 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.

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S- U
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at:
http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Finally, note that the assignment of letter grades will be influenced by the overall performance of the class. In other works, a rising tide lifts all boats.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Policy Related to Make up Exams or Other Work

Any requests for make-ups due to technical issues UST 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.

Policy Related to Required Class Attendance

Please note all faculty are bound by the UF policy for 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

Expectations Regarding Course Behavior

Students are expected to be prepared and ready to participate in class discussions. Professional behavior is expected at all times.

Communication Guideline

Students will be expected to communicate via official UF email.

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

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. Please note that guests are **not** permitted to attend either cadaver or wet labs. 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

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

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 two or three 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/.

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. 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, https://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

Tentative Course Schedule

Section 1: Theory					
Class	Theme	Readings	Lecture	Assignment	Reflection
1 - May12	Thinking in Systems	"Thinking in Systems" by Meadows	Benson: Introduction	What is Systems Thinking	
2 - May14	Thinking in Systems	"Thinking in Systems" by Meadows	Chaos and Systems	Identify systems and analytical approaches	Today's problems come from yesterday's "solutions."
3 - May 19	Nature of Systems, Systems in Nature	Boulding	Horky: 6 Reasons for Systems Thinking	Identify a system and relate it to its environment	The harder you push, the harder the system pushes back.
4 - May 21	Structures and Conditions in Systems	Ivey; Smith	Benson: System Structures and Conditions	Create a causal loop diagram for your system	Behavior grows better before it grows worse.
5 - May 26	This is just a mess	"Systems, Messes and Interactive Planning" by Ackoff; "Accelerating and balancing	Horky: Messes and Unintended Consequences	Identify unintended consequences that occur in a system	The easy way out usually leads back in

		influences" by North			
6 -May 28	Learning Organizations	"The Fifth Discipline" by Senge	Benson: Senge and The Fifth Discipline	Identify learning organizational approaches	The cure can be worse than the disease.
7 - Jun 2	Theory Exam	None	None	None	None

Section 2: Practice					
Class	Theme	Readings	Lecture	Assignment	Reflection
8 - Jun 4	Systems in Healthcare Administration	Johnson Chapter 1 & 2	Benson: Learning Organizations in Health Administration	Identify subsystem interactions with Health Administration	Faster is slower.
9 - Jun 9	Systems in Clinical Healthcare	Johnson Chapter 3	Benson: Curative and Preventative Care	Identify subsystem interactions with Clinical Healthcare	Cause and effect are not closely related in time and space.
10 - Jun 11	Systems in Public Health	Johnson Chapter 4	Benson: Population Health	Identify subsystem interactions with Public Health	Small changes can produce big results...but the areas of highest leverage are often the least obvious.
11 - Jun 16	Systems Approach to Health Reform	Value	Cistola: Value Based Healthcare	Identify an ideal state	You can have your cake and eat it too --- but not all at once.
12 - Jun 18	Systems Approach to Health Equity	Diez Roux	Cistola: Health Disparities and Complex Care	Identify leverage points	Dividing an elephant in half does not produce two small elephants.

13 - Jun 22-25	Final Team Presentations	None	None	None	Final Team Presentations