## SPS 300: Systems Thinking and Problem-Solving in Complex Organizations College of Education and Behavioral Sciences School of Professional Studies WKU Web Fall 2019

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Office Hours: Mondays & Wednesdays: 11:00 AM to 1:00 PM. I will respond to your emails within 24 hours

# **Course Description:**

An introduction to systems thinking methodologies and methods, the characteristics of complex systems, and the process of using a systems thinking perspective to solve problems in business organizations.

## **Course Material:**

We will use the following textbook:

Jackson C. Michael. Systems Thinking: Creative Holism for managers. Wiley ISBN- 9780470845226.

We also use several articles on *applied systems thinking* I provide as reading assignments. Links to these articles are provided on Blackboard's course site under the content area labeled "course material".

# **Pre-Requisites:**

21 hours of Foundations & Explorations coursework or junior status.

# **Special Note:**

"In compliance with university policy, students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services in Downing University Center A-200. The OFSDS telephone number is (270)745-5004; TTY is (270)745-3030. Per university policy, please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services."

# **Course Objectives and Student Learning Outcomes:** Upon successful completion, the student should be able to:

Learning Objective		Activities	Assessment
-	Define the systems thinking perspective and language.	Reading Assignments, Discussion Board Interactions (responding to the weekly discussion questions and replying to fellow leaners posts).	Discussion Board activities and writing assignments.
2.	Explain the systems thinking process.	Reading Assignments, Discussion Board Interactions (responding to the weekly discussion questions and replying to fellow leaners posts	Discussion Board activities and writing assignments.
3.	Identify and apply several systems thinking approaches.	Reading Assignments, Discussion Board Interactions (responding to the weekly discussion questions and replying to fellow leaners posts	Discussion Board activities and writing assignments.
4.	Analyze how systems evolve.	Reading Assignments, Discussion Board Interactions (responding to the weekly discussion questions and replying to fellow leaners posts	Discussion Board activities and writing assignments
5.	Compare the study of individual components to the analysis of entire systems.	Reading Assignments, Discussion Board Interactions (responding to the weekly discussion questions and replying to fellow leaners posts	Discussion Board activities and writing assignments
6.	Evaluate how system-level thinking informs decision- making, public policy, and/or the sustainability of the system itself.	Reading Assignments, Discussion Board Interactions (responding to the weekly discussion questions and replying to fellow leaners posts. A course project	Discussion Board activities and writing assignments.

## Grading

Percentage Grade	Letter Grade
90% to 100% (597 to 670 points)	А
80% to 89% (530 to 596 points)	В
70% to 79% (463 to 529 points)	С
60% to 69% (402 to 462 points)	D
Below 60% (below 402 points)	F

<u>Note:</u> I reserve the right to make corrections to the grade book to keep it consistent with the course syllabus, thereby reflecting your true performance and not errors.

Assignment	Grade
Discussion Board Assignments	220 points (7 weeks @ 30 points per week,
	and 40 points for the last assignment)
Ford Motor Company Paper	200 points
Course Project (Final Paper)	250 points
Total	670 points

#### **Rules for Success:**

- 1. Timely Completion of all assigned course-work
- 2. Active Participation on the Discussions Board
- 3. Professional Etiquette on the Discussion Board; that is, replying and responding to posts with the utmost respect and courtesy

#### **Class Assignments:**

Responding to questions in the discussion boards are not enough to earn a complete grade. Students are expected to respond to at least two other posts. Responses to questions (main posts) are to be substantial with an average of 250 words. Merely agreeing and disagreeing with fellow learners' answers is not sufficient to be considered a replying post; you should justify your position. Posts related to the discussions questions are due no later than Thursdays of every week; that should give your fellow learners enough time to respond to your post. *You will also write two papers.* **I will post instructions to those writing assignments on** 

*Blackboard under the content area labeled "Assignments". The first paper is an analysis of a research article on applied systems thinking. In the last paper (course project), you will argue for a solution, based on a system thinking approach, that addresses both opportunities and challenges faced by a high growth business company, which operates in a highly competitive environment.* 

## Blackboard

This course will be delivered via Blackboard, your online learning community, where you will interact with your classmates and with me. Within the course site you have access to learning materials, tutorials, and the syllabus. You can discuss issues, submit assignments, take quizzes, and email other students and me. Assistance and help are also available on the use of Blackboard.

#### **Online Discussions:**

To maximize your learning, you are expected to participate actively in the discussion to the extent of contributing a response of at least 250 words to each question I post and 50 words to at other students' posts per question. The responses should add substance, request clarification, or challenge the assertions made by providing real or hypothetical scenarios that the original posting did not cover. **Remember, the purpose of this methodology is to stimulate academic debate and not to verbally attack another student. Do not consistently wait until the last day to respond to questions, as this limits your class interaction with other students and class interaction is a portion of your grade.** 

#### **Discussion Etiquette:**

Western Kentucky University is committed to open, frank, and insightful dialogue in all of its courses. Diversity has many manifestations, including diversity of thought, opinion, and value. We encourage all learners to be respectful of that diversity and to refrain from inappropriate commentary. The following are good guidelines to follow:

- 1. Never transmit, promote, or distribute content that is known to be illegal.
- 2. Never make a statement that is harassing, threatening, or embarrassing to any other students.
- 3. If you disagree with someone, respond to the subject, not the person.
- 4. Never make a statement that is harmful, abusive; racially, ethnically, or religiously offensive, vulgar; sexually explicit; or otherwise potentially offensive
- 5. If I believe that you have violated the above guidelines I will address that concern in a private email to you.

Blackboard Discussion Objectives and Grading Rubric

- > The discussion questions provide students with a context to:
  - Demonstrate written communication skills;
  - Apply critical thinking skills;
  - Evaluate one's learning.
- ➢ Grading Rubric

Assignment	Quality	Grade
3 Discussion Questions	Substantial answers that draw	5 points each for a
	from documented sources.	total of 15 points
Minimum of 3 replies to fellow	Replies are expected to add	3 points each for a
learners (one reply for each	substance, request clarification, or	total of 9 points
Discussion Question)	challenge assertions.	
Responses timeliness	Responses to the DQs are due by	6 points
	Thursdays. Replies are open for	
	the whole week.	
Total		<b>30</b> points

#### **Plagiarism:**

To represent work taken from another source as one's own is plagiarism. Plagiarism is a serious offense. The academic work of a student must be his/her own work. One must credit the source from which material was borrowed.

#### **Cheating:**

No student shall receive or give assistance not authorized by the instructor in taking an examination or in the preparation of an essay, problem assignment or other project, which are submitted for purposes of grade determination. If you are caught cheating, you will fail this class.

# TENTATIVE COURSE WORK SCHEDULE:

I will monitor the discussion board from behind the scenes for substance, courtesy, and collegiality; and intervene only if I believe that I should do so to steer the discussions in a certain direction and/or challenge your critical thinking.

I will contact you individually with private emails if I feel that I need to address issues pertaining to posting quality or any other issue.

Week	Activities(Reading Assignments)	Assignments
1	Click on the button labeled "discussions" on the course menu and reply to the Syllabus, Discussion questions grading rubric, and Response Methodology Forums. Go to the introductions forum and introduce yourself to your peers. Read Chapters 1 and 2: <b>The Systems</b> <b>Language</b> and <b>Applied Systems</b> <b>Thinking.</b> Read Michael Goodman's articles: <b>System Thinking as a Language &amp;</b> <b>Systems Thinking: what, why, when, where, and how?</b>	Respond to the discussion questions by Thursday (a minimum of 250 words per question) and reply to at least one of your fellow learners' posts <b>per question</b> by Sunday (a minimum of 50 words).
2	Study chapters 4 and 5 Hard Systems Thinking Systems Dynamics: The Fifth Discipline Read Laurence Fisher's article : The Prophet of Unintended Consequences	Respond to the discussion questions by Thursday (a minimum of 250 words per question) and reply to at least one of your fellow learners' posts <b>per question</b> by Sunday (a minimum of 50 words).
3	Study chapters 6 & 7 Organizational Cybernetics Complexity Theory	Respond to the discussion questions by Thursday (a minimum of 250 words per question) and reply to at least one of your fellow learners' posts <b>per question</b> by Sunday (a minimum of 50 words).
4	Study chapters 8 & 9 Strategic Assumption Surfacing and Testing Interactive Planning	Respond to the discussion questions by Thursday (a minimum of 250 words per question) and reply to at least one of your fellow learners' posts <b>per question</b> by Sunday (a minimum of 50 words). <b>Assignment #1 is due on November 17<sup>th</sup></b> , (Ford Motor Company paper)
5	Study chapters 10 & 14	Respond to the discussion questions by Thursday (a minimum of 250 words per

Week	Activities(Reading Assignments)	Assignments
	Soft Systems Methodology Total Systems Intervention	question) and reply to at least one of your fellow learners' posts <b>per question</b> by Sunday (a minimum of 50 words).
6	Study chapter 15 Critical Systems Practice	Respond to the discussion questions by Thursday (a minimum of 250 words per question), and reply to at least <b>three</b> of your fellow learners by Sunday (a minimum of 50 words). There is only one question this week.
7	To help you address the learning outcomes targeted by your course project (your final written paper), weeks 12 and 13 discussion question focuses on summarizing what we've learned thus far. That is, compare and contrast the different approaches of systems thinking covered in the previous weeks (i.e., methodologies, methods, uses, and managerial values). What approach seems to be more powerful in terms of tackling complex	Respond to the discussion questions by Thursday (this is a short essay-type of question; a minimum of 400 words is needed) and reply to at least two of your fellow learners' posts.
8		Final Paper (course project) due December 11 <sup>th</sup> by the end of the day.