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

Instructor: Dr. Pamela J. Decker Office: No office location on campus Email: pamela.decker@wku.edu

I will make every attempt to respond to your emails within 24 hours.

Office Hours: By Appointment – Please email and I will be happy to set up a call, video conference, or a face-to-face meeting with you.

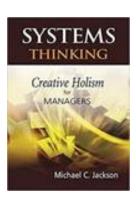
# **Course Description:**

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, M.C. (2003) Systems Thinking: Creative Holism for managers. Wiley ISBN- 9780470845226



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

# **Pre-Requisites:**

21 hours of Foundations & Explorations coursework or junior status.

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 learners' 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 learners' 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 learners' 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 learners' 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 learners'85 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)	A
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 DB 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 coursework
- 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 discussion board questions are not enough to earn a complete grade. Students are expected to respond to at least three (3) fellow learners' posts. Responses to questions (main posts) are to be substantial with an average of 150 words per question. Merely agreeing and disagreeing with fellow learners' answers is not sufficient to be considered a replying post; you should justify your position. Individual posts related to the discussion questions are due no later than Thursday of every week; that should give your fellow learners enough time to respond to your post. However, you have all week (until Sunday midnight) to reply to your fellow learners. (See Grading Rubric below for points assigned for discussion questions and learner responses)

You will also write two papers. I will post instructions to the writing assignment on Blackboard under the content area labeled "Assignments". The first paper is an analysis of a research article on applied systems thinking. The second paper (course project) will serve as your final. For this paper 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 operating in a highly competitive environment.

# AI tools prohibited:

While I appreciate advancements in technology, I value even more one's ability to think critically and to write proficiently. Therefore, artificial intelligence (AI) tools are not permitted for any type of work in this class. If you choose to use these tools, your actions will be considered academically dishonest and a violation of the <u>WKU Student Code of Conduct</u>.

#### 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, 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 150 words to each question posed and 50 words to at least three other students' posts. 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 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
3 replies to fellow learners (replies	Replies are expected to add	3 points each for a
must be for different questions)	substance, request clarification, or	total of 9 points
	challenge assertions.	
Responses timeliness	Responses to the DQs are due by	6 points
	Thursdays. Replies are open for	
	the whole week.	
Total		30 points

### **COURSE CONDUCT**

For this class to work in the way that it is most effective, we must build and maintain a climate of respect and trust. Activities that diminish the learning environment will not be tolerated. Examples of such behaviors include (but are not limited to):

- Disrespectful or inappropriate posts or replies
- Cheating (giving, using, or attempting to use unauthorized materials, information, or devices in any academic exercise).
- Copying from another student's written assignment or allowing a student to copy your own work.
- Plagiarism (work worded too closely to a source other than your own)

Severe penalties will be associated with undertaking any of the aforementioned behaviors. Any incident of cheating will result in **FAILING** the course.

#### THE LEARNING CENTER AND PEER TUTORING SERVICES

The Learning Center (TLC) provides free tutoring services that empower students to achieve academic success. Trained peer tutors are available to review course content, answer questions, and demonstrate effective study strategies. TLC offers individual appointments and group sessions (PASS) for hundreds of undergraduate courses. For more information or to make an appointment, visit <a href="https://www.wku.edu/tlc/">www.wku.edu/tlc/</a>.

# WRITING CENTER ASSISTANCE

The Writing Center on the Bowling Green campus will have writing tutors available to offer advice to current WKU students on any stage of their writing projects. In-person tutoring is available in Cherry Hall 123 from 10 a.m.-4 p.m. Monday through Friday and in the Cravens Commons (at the horseshoe-shaped reference desk) from 5-9 p.m. on Sunday through Thursday evenings. WKU students may also request feedback on their writing via email or arrange a real-time Zoom conference to discuss a paper. See instructions and how-to videos on the website (<a href="https://www.wku.edu/writingcenter/">https://www.wku.edu/writingcenter/</a>) for making appointments. Walk-in feedback is available unless tutors are booked up. Students may also get short writing questions answered via email; just put "Quick question" in the subject line to (writingcenter@wku.edu).

The WKU START Centers will be offering writing tutoring sessions via Zoom as well as in person in their Glasgow and Elizabethtown locations. More information on how to make appointments and what to expect from your appointment will continue to be posted at (https://www.wku.edu/startcenter/).

### ADA ACCOMMODATION

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, Room 1074. The SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at <a href="mailto:sarc.connect@wku.edu">sarc.connect@wku.edu</a>. Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.

# TITLE IX/DISCRIMINATION & HARRASSMENT

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Sex and Gender-Based Discrimination, Harassment, and Retaliation (#0.070) and Discrimination and Harassment Policy (#0.2040). Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Executive Director, Office of Institutional Equity/Title IX Coordinator, Ena Demir, 270-745-6867 or Title IX Investigators or Michael Crowe, 270-745-5429. Please note that while you may report an incident of sex/gender-based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

# WKU Counseling and Testing Center

The university experience should be challenging, but not overwhelming. To this end, the WKU Counseling Center provides a variety of services to help strengthen students' capacity to tolerate distress, form healthy relationships, and seek healthy expressions of their ideals and values. If you would like to speak with someone, you may contact WKU's Counseling and Testing

Center at 270-745-3159 or use their Here To Help service at <a href="https://www.wku.edu/heretohelp/heretohelpemail.php">https://www.wku.edu/heretohelp/heretohelpemail.php</a>. If you need immediate help, please visit the Counseling Center at 409 Potter Hall or call the 24-hour emergency help line at 270-843-4357.

# **REGULAR AND SUBSTANTIVE INTERACTION (Online Courses Only)**

The U.S. Department of Education requires that distance education courses must include regular and substantive interaction between students and faculty. For more information about Regular and Substantive Interaction at WKU, please visit the <u>Regular and Substantive Interaction in Online and Distance Learning webpage</u>.

In this course, regular and substantive interaction will take place in the following ways:

- Description of RSI activity, and
- Description of RSI activity.

# Example:

The U.S. Department of Education requires that distance education courses must include regular and substantive interaction between students and faculty. For more information about Regular and Substantive Interaction at WKU, please visit the <u>Regular and Substantive Interaction in Online and Distance Learning webpage</u>.

In this course, regular and substantive interaction will take place in the following ways:

- Weekly synchronous sessions with faculty and students,
- Faculty participation in weekly discussion boards,
- Weekly announcements, and
- Timely and detailed feedback on assignments provided within one week of submission.

Note: Your activities may look different from these as they are used solely for the purpose of this example.

# **COURSE WORK SCHEDULE** (tentative – I reserve the right to change this 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
Week 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: The Systems Language and Applied Systems Thinking  Read Michael Goodman's articles: System Thinking as a Language & Systems Thinking: What, Why, When, Where, and How?	Respond to the discussion questions by <b>Thursday</b> (a minimum of 150 words per question) and reply to at least 3 of your fellow learners' posts per question by <b>Sunday</b> (a minimum of 50 words).
Week 2	Study Chapter 4 and 5: Hard Systems Thinking and Systems Dynamics: The Fifth Discipline  Read Laurence Fisher's article: The Prophet of Unintended Consequences.	Respond to the discussion questions by <b>Thursday</b> (a minimum of 150 words per question) and reply to at least 3 of your fellow learners' posts per question by <b>Sunday</b> (a minimum of 50 words).
Week 3	Study Chapters 6 and 7: Organizational Cybernetics and Complexity Theory	Respond to the discussion questions by <b>Thursday</b> (a minimum of 150 words per question) and reply to at least 3 of your fellow learners' posts per question by <b>Sunday</b> (a minimum of 50 words).

Week 4	Study Chapters 8 and 9: Strategic Assumption Surfacing and Testing and Interactive Planning  Assignment #1 Paper (Ford Motor Credit Company)	Respond to the discussion questions by <b>Thursday</b> (a minimum of 150 words per question)
Week 5	Study Chapters 10 and 14: Soft Systems Methodology and Total Systems Intervention	Respond to the discussion questions by <b>Thursday</b> (a minimum of 150 words per question) and reply to at least 3 of your fellow learners' posts per question by <b>Sunday</b> (a minimum of 50 words).
Week 6	Study Chapter 15: Critical Systems Practice	Respond to the discussion questions by <b>Sunday</b> (a minimum of 150 words per question). and reply to at least 3 of your fellow learners' posts per question by <b>Sunday</b> (a minimum of 50 words).
Week 7	To help you address the learning outcomes targeted by your course project (your final written paper), this week's discussion question focuses on summarizing what we have 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 problems? You may want to check a short interview with Michael Goodman on how Systems Thinking has changed over the years: System Thinking Hits Its Stride by Kali Saposnick.	Respond to the discussion questions by <b>Thursday</b> (this is a short essay-type question with a minimum <b>400-word</b> requirement).
Finals Week	Assignment #2 Paper (Final Course Project)	Your final course project paper is due.