Syllabus

Syllabus is available to registered students at Blackboard Learning Systems: (myMason)

Faculty
Instructor: **Billy “Skip” Powers, PhD**: (703) 919-1403.

**Office Hours:** Virtual. To schedule a private appointment by phone, email me your preferred mode, date and time (include course number on all communications). Email bpowers7@gmu.edu or call/text (703) 919-1403. Please identify yourself by name/course number if using SMS/IM option.

**Course Description**

*Prerequisite:* None.

Systems Thinking, at its core, is defined as “an interconnected set of elements that is coherently organized in a way that achieves something.” Though, archetypes (also known as *System Traps*) have the propensity to challenge approaches by altering the structure, disrupting the goal, weakening the feedback loops. Recognizing “traps” provide opportunity to explore critical thinking in a new way.

This course will dissect Systems Thinking and explore how to apply its principles to complex issues. Students will explore the Cynefin Framework, how to advance from the Complex, Complicated, Chaotic, and Simple and apply this strategy to System Thinking approach(es). Applying these principles in a visual (MindMap) will help illustrate how a complex problem can be managed with such tools.

Students will work individually and in groups to research case-studies around Systems Thinking challenges and present MindMap visualization(s) to defend solutions, findings, hypotheses, and research. A research paper that contributes to the body of knowledge on the application of Systems Thinking approaches (supported by credible research) will conclude the course objectives.

**Delivery Method**

This course will be delivered in an asynchronous format. Each week you will complete readings, view multimedia resources, answer questions regarding the readings, and will engage in discussion board conversations that will provide you the opportunity to verify/validate your understanding of course content in preparation for the final presentation product. Please refer to the Syllabus posted on Blackboard for any changes in activities or assignments.

**Expectations:**

- **Course Week:** Our course week starts on **Monday** and finishes on **Sunday**. **Log-in Frequency:** Students must actively check the course Blackboard site and their myMason email for communications from the Instructor; at a minimum this should be 2 times per week.
• **Participation**: Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials and completing course activities and assignments. Participating in course discussions is optional but *strongly recommended* to assist you in reinforcement of the learning material(s).

• **Technical Competence**: Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance and manage the resolution if they experience technology challenges with the course.

• **Technical Issues**: Students should expect that they could experience some technical difficulties at some point in the semester and should, therefore, budget their time accordingly. Late work will not be accepted.

• **Schedule**: Remember, this course is not self-paced. There are **specific deadlines** and **due dates** listed in the Syllabus section to which you are expected to adhere. It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities, and assignments.

• **Advising**: If you wish to schedule a one-on-one meeting to discuss course requirements, content, or other course-related issues and, you are unable to come to the Mason campus, we may meet via telephone or web conference. To schedule a meeting – virtual or in-person please contact me at bpowers7@gmu.edu

• **Netiquette**: Our goal is to be collaborative, not combative. Experience shows that even an innocent remark in the online environment can be misconstrued. I suggest that you always re-read your responses carefully before you post them to encourage others from taking them as personal attacks. Be positive in your approach to others and diplomatic with your words. I will do the same. Remember, you are not competing but sharing information and learning from one another as well as from me.

**Learning Objectives**
Specific learning objectives for AIT690 include:
1. **Applied Research Concepts**: dissect trends in research/design delivery (oral/visual)
2. **Systematic & Defensible Presentation Methodologies**: explore methods of defensible presentation
3. **Identify/Communicate Methodological Considerations**: dissect methodological considerations/outcomes
4. **Deliver compelling visual and oral presentations**: deliver data/literature supported defensible presentation (oral and visual)
5. **Inquiry-Based application in systems approaches**: Orientation, Hypothesis; Experiment; Data analysis; Application of data against the mode; Questions/Implications; Conclusion

**Student Roles and Responsibilities**
- Students in this class are adults completing the Master of Science education; they are expected to have read and are accountable for all details of this syllabus.
- This course is an asynchronous format.
- You are reminded of academic integrity contained in the Mason Honor Code. Each student is thereby bound to deliver their own work in accordance with guidance provided by the Instructor.

**Questions**
All personal questions should be resolved via Mason Email to the Instructor (bpowers7@gmu.edu) or, by appointment with the instructor.
Technical Requirements
To participate in this course, students must have the following resources:

- Personal computer with at least 1.0 GHz speed, 250 Mb RAM;
- Microphone/speakers or USB headset compatible with the computer used for the course;
- Video camera compatible with the computer used for the course;
- High-speed Internet access with a standard, up-to-date browser, either Internet Explorer or Mozilla Firefox. Opera and Safari are not compatible with Blackboard;
- Consistent, reliable access to Mason email and Blackboard, the official methods of communication for this course, and;
- Java software plug-in for PCs and Macs respectively, is available for free downloading.

For technical questions regarding Blackboard, see Courses Support for Students and Blackboard Tutorials. If you still have questions, email courses@gmu.edu for assistance. For technical questions regarding computer networking, see ITS Support for Students. If you still have questions, email support@gmu.edu or call (703) 993-8870.

Assignments
All work should be the product of your best (critical) thinking. Proper spelling, syntax, sentence structure and vocabulary are the marks of an educated person; they should be evident in your work. “IM-speak” is inappropriate for this class. Digital deliverable of each assignment must be posted to the Blackboard Discussion Board (and/or Syllabus Instructions) by 5PM Sunday in the week in which assignment is posted, unless otherwise directed by me. All reading assignments are due the week the assignment is posted, unless otherwise directed.

Required Text

Required Readings (See Content Tab on Blackboard and Discussion Board)


Retrieved from https://search-proquest-com.mutex.gmu.edu/docview/230023877?accountid=14541

Required Presentations
What is Systems Thinking 3:55
Systems Thinking: 8 System Traps and How to Avoid Them 7:03
The Value of Systems Thinking 10:09
Jake Wagner: Cynefin Framework: Complex Systems 16:46
Questions
All questions should be asked and resolved via Mason email bpowers7@gmu.edu or by appointment.

Assignments
Written work should be the product of your best critical thinking. Proper spelling, syntax, sentence structure and vocabulary are the marks of an educated scholar; they should be evident in your work. “IM-speak” is inappropriate for this class. Assignments are due as published; late work is not accepted. Collateral materials, such as templates and forms that support assignments and other course content, are available in Course Contents folder in Blackboard.

Grades
Grades will be awarded in accordance with the Mason Grading System for graduate students. Raw scores may be adjusted by the Instructor to calculate final grades. Final grades will be posted to Patriot Web which is the only vehicle for students to obtain those grades on the last day of the Term (December 18, 2019). Grades will be composed of the following items and weights:

Grades will be composed of the following elements and weights:
- Class Participation (Discussion Board) 10%
- Visual MindMap Presentation Practical 20%
- Systems Thinking/Reflexive Research Paper 70%

Mason Policies and Resources for Students
a. Students must adhere to the guidelines of the George Mason University Honor Code
b. Students must follow the university policy for Responsible Use of Computing
c. Students are responsible for the content of University communications sent to/from their George Mason University email account and are required to activate their account and check it regularly. All communication from the program will be sent to students solely through their Mason email account.
d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students’ personal experience and academic performance.
e. Students with disabilities who need accommodations in a course must register with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester.
f. University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing
g. Diversity and Religious Holidays
h. Student Privacy
i. University Libraries
j. Family Education Rights and Privacy
**SCHEDULE:** Class schedule for this semester includes: (8.23.21)

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<th>WEEK</th>
<th>Topics</th>
<th>Reading/Assignments</th>
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<td>1</td>
<td><strong>INTRODUCTION</strong>&lt;br&gt;Welcome &amp; Orientation&lt;br&gt;Syllabus Review and Group Assignments&lt;br&gt;Systems Presentation/Research Paper overview</td>
<td>Organize Team(s)/Group(s)&lt;br&gt;Read: Meadows – “Thinking in Systems”&lt;br&gt;Check-in AIT 690 Discussion Board&lt;br&gt;Discussion Board: Systems definition</td>
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<td>2</td>
<td>Systems Application</td>
<td>Team Rosters Due (Post to Group Discussion Boards)&lt;br&gt;Discussion Board: Systems Journal Review</td>
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<td>3</td>
<td>Systems Management: Cynefin Framework</td>
<td>Discussion Board: Cynefin Framework</td>
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<td>4</td>
<td>Reflexive Inquiry</td>
<td>Discussion Board: Reflexive Inquiry</td>
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<td>5</td>
<td>Research Paper/Poster Presentation Overview</td>
<td>Discussion Board: Research Paper/Poster Project</td>
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<td>6</td>
<td>Research Paper Outline</td>
<td>Discussion Board: Research Paper Outline</td>
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<td>7</td>
<td>MindMap (Group Visual Preparation)</td>
<td>Discussion Board: MindMap</td>
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<td>8</td>
<td><strong>FALL BREAK NO CLASSES</strong></td>
<td><strong>FALL BREAK NO CLASSES</strong></td>
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<td>9</td>
<td>System Traps</td>
<td>Discussion Board: System Traps</td>
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<td>10</td>
<td>Group Presentation Collaboration</td>
<td>Group SITREP Due (Post to Discussion Board)</td>
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<td>11</td>
<td>Group Presentation Collaboration</td>
<td>Group SITREP Due (Post to Discussion Board)</td>
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<tr>
<td>12</td>
<td>Group Presentation Collaboration</td>
<td>Group SITREP Due (Post to Discussion Board)</td>
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<td>13</td>
<td>Group Visual Presentation: MindMap</td>
<td>Group MindMap Presentations (Post to Discussion Board)&lt;br&gt;<strong>Post NLT 11.17.21</strong>&lt;br&gt;Discussion Board Response(s)</td>
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<td>14</td>
<td><strong>THANKSGIVING WEEK NO CLASSES</strong></td>
<td><strong>THANKSGIVING WEEK NO CLASSES</strong></td>
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<td>15</td>
<td>Conduct Research &amp; Literature Review(s)</td>
<td>Research / Discussion Board Activity</td>
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<tr>
<td>16</td>
<td>Conduct Research &amp; Literature Review(s)</td>
<td>Research / Discussion Board Activity</td>
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<tr>
<td>17</td>
<td>Research Paper Submission&lt;br&gt;Submit Research Paper NLT: 12.13.21&lt;br&gt;Final Grades Posted NLT: 12.15.21</td>
<td>Research Paper Due: 70% of Course Grade</td>
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**Students should begin scholarly review early in support of Group Project assignment. Appointments available to discuss individually or collectively, this Systems Thinking Research Project.**