DPLS 776sp14  Leadership and Complexity Science

Spring 2014  3 Credits

Professor: P. Caroline Fu, PhD
email: fu@gonzaga.edu
Office hours: Please email for an appointment
Office phone: (509) 313-3488
Website: https://connect.gonzaga.edu/fu

Class Logistics

Meeting Dates & time: Fridays, 6-10 pm; Room: Til 310

Course Overview

The complexity of human motive, the entwinement of its threads, is infinite. The point . . . is that the zest of human adventure presupposes for its material a scheme of things with a worth beyond any single occasion. (Whitehead, 1933/1961, p. 288)

Leadership is the most observed yet least understood phenomenon (Burns, 1979). It is an occasion of complexity. Analyzing this complexity is similar to an attempt to discern the infinite reflective images between a pair of parallel mirrors; its “order to chaos to order” (Briggs & Peat, 1989) confounds us. We feel being in the midst of temporal turbulent complexity. Fluxing in “a temporal maelstrom as much as a substantive one” (Vaill, 1998, p. 32), leaders are tasked to “manage time streams when the surprising, novel, obtrusive events—the permanent white water” (p. 31). Reality demands leaders to respond at a highly perplex level attending to a constant search for veracity in a wholistic multiplicity.

The focus of this course is on understanding complexity science, cognition, and theory pertaining to leadership phenomena. The course progresses through stages of understanding, moving from the fundamental nature of chaos and complexity, to complex social systems and leadership, to introduction to various complexity modeling techniques.

Course Objectives

This course expands our thinking and unleashes us from the limitation of our fragmented perceptions, to enfold leadership phenomena in a wholistic paradigm. This course expects you to:

- increase understanding of complexity and be open to new possibilities;
- embrace order-to-chaos-to-order pertained to the nature of leadership;
- understand the spatiotemporal dynamics of leadership phenomena;
be able to discern patterns amidst complexity;
- gain clarity in the moments of perplexity;
- comprehend complexity science and its theoretical concepts; and
- become familiar with currently available complexity modeling techniques.

**Diversity and Neutrality**

In this course, we explore the “implicate order” (Bohm, 1980) in complexity and engage in a dialogue to find ways that glue together the fragments of human thought (Prigogine, 1997). We seek to gain “process wisdom” and continue to “see pathways through complexity and confusion, how purpose can remain alive and relevant when, for those distracted by the temporal maelstrom, the sense of direction and order has become utterly splintered” (Vaill, 1998, p. 35).

By developing skills in philosophizing and theorizing and building our dexterity in logic reasoning, we take precaution to guard against making fallacious statements regarding new concepts and meanings of leadership. Logic reasoning (Russell, 1925/2001) helps one maintain a stoic perspective, a neutral/supportive/authentic stance, and recognize there are multiple solutions to a problem in leadership phenomena. Multiple solutions denote mathematical singularity and multiple realities concur with quantum physics, together they reveal sense perceptions of being in realities of different temporal-spatial dimensions (Einstein, 1922/2005).

As a learning community of practice, we expect all learners to be open and honest in sharing their own experiences, and to respect those of others. By holding open a learning space in which they will honor differences in viewpoints, beliefs, values, stages in life, states of being, and paradigmatic opinions. Our learning activities will require us all to support one another and mutually strengthen commitment to social justice and morality. These disciplines enable us to think out-of-the-box and enhance our ability to understand paradoxes in events and to find complementarity. Together, we discern an optimal path amidst complexity and chaos, we gain clarity of what matters to the collective purpose.

**Learning Activities:**

This course reflects a learning philosophy that the adult education at a doctoral level functions as what Knowles (1980) describes as andragogical learning as opposed to pedagogical teaching. That is, we expect doctoral leadership students to be intellectually motivated in self-directed learning with occasional individualized advice and guidance to thrive both intellectually and spiritually. Thus, during this course, we hope to co-create a learning space, in class of online, a virtual presence where the learning facilitator/professor, the learning materials, group discussion, and peer supports all merge in synchronicity to maximize student learning.

**Class Meeting Attendance**

This is a hybrid course. The four in-class and four online discussions focus on integrating themes from the various texts and are pertinent as they stimulate intellectual growth for all members.
Thus, participation in the eight class sessions, in class or online, is a requirement for this course. If you miss a class session, please inform me via email or phone prior to the missed session. Missing two or more class sessions will result in an incomplete grade and require either taking the course again or auditing it at some future time.

**Reading Assignments**

Please complete the required reading assignments, listed in Table 2: Outline of Class Sessions. You might peruse the whole book in general then read areas of special interest in detail. Beyond the required readings, you might want to venture into additional works pertain to your interests individually. Please write thoughts and learning in your reflection journals. Post your points and inquires to dialogue with peers in the Discussions area on the Blackboard.

**Writing Assignments**

Please email writing assignments (in ms-Word, APA-6 format), except the Reflection Journals, to me at fu@gonzaga.edu before or on the due date specified in Table 2. They are:

- **Pre-class paper (3 pages max.):** due prior to our 1\textsuperscript{st} class meeting; reflect on first reading (Miller & Page, 2007) and postings in the Blackboard \rightarrow Content \rightarrow #1 Session folder. Please include a statement about a leadership theory of your interest for going deeper in thought (10-30 words).

- **Reflection Journals on reading:** due at our 2\textsuperscript{nd} - 8\textsuperscript{th} class sessions: each is a 1-page (text, graphic, and/or sound) learning reflection on class discussions, presentations, and/or thoughts on next reading assignments. These journals, excluding confidential information, are to be posted to the Blackboard's Discussion area to exchange critiques prior to class.

- **Special interest project proposal:** is due at our 5\textsuperscript{th} class session: a 1-page paper that ideates the nature of your proposed leadership theory or model. The proposal could be about modifying an existing theory or a combination of numerous models to address a gap in explaining some leadership phenomenon or conceptualizing a new concept. Please include your thought on how the proposed project will contribute to the leadership studies to better address, analyze, and/or explain the complexity of leadership phenomena.

- **Special interest project final paper (10-page max.):** due five days after our last class meeting, describes your proposed concept, theorizes, philosophizes, and suggests a method for confirming/validationg the concept. Please include presentation slides, your reflections, revelations, and epiphanies on project experience, learning in this course, possible future extended learning, and any modifications made to your original special interest proposal.

**Writing Criteria**
APA-6 style is required, such as: 1-inch margins-top, bottom, left, and right; 12 point Times New Roman font. There are other guidelines such as, appropriate selection of headings, proper placement of citations, enclosing direct quotes with quotation marks (author, year, cited page numbers) within the text and a complete reference list. You can find scholarly paper guidelines and academic paper templates on DPLS program website: http://www.gonzaga.edu/Academics/Colleges-and-Schools/School-of-Professional-Studies/Degrees-Programs/PhD-Studies/Current-Students/CSW_Section/Templates.asp

Your writing should be clear and succinct demonstrating careful word choice with skillful, parsimonious, and purposeful sentence constructions. We expect all papers to be grammatically flawless. Transitions between paragraphs and sections evidence your efficacy of weaving concepts, themes, and purposes together. Appropriate summaries and effective conclusions are vital elements of good writing. Careful proof reading of your paper is a basic expectation before exchanging your paper with your learning buddies.

**Electronic Learning Portfolio**

We ask each of you to build an electronic learning portfolio, which reflects all learning accumulated over the semester. The electronic portfolio consists of your papers as outlined in the Writing Assignments above, special interest project presentation slides and other learning papers that reflect your learning in this course. The following is a portfolio checklist and corresponding percentages toward your grade for guiding you through the assembly process.

*Table 1: Learning Portfolio*

<table>
<thead>
<tr>
<th>Portfolio item</th>
<th>Percent toward grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-class paper</td>
<td>10%</td>
</tr>
<tr>
<td>7 Reflection Journals</td>
<td>$7 \times 5% = 35%$</td>
</tr>
<tr>
<td>Special interest project proposal</td>
<td>5%</td>
</tr>
<tr>
<td>Special interest project final paper</td>
<td>40%</td>
</tr>
<tr>
<td>Portfolio folder completeness</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Grading**

The grading conveys your individual learning achievement in this course, a before-after comparison of self, not a bell-curve competition with others. Point/Grade correspondence:

- 95 - 100% = A;
- 90 - 94%  = A-;
- 85 - 90%  = B;
- 80 - 84%  = B-
<table>
<thead>
<tr>
<th>Week</th>
<th>Pre-class Readings</th>
<th>Writing due</th>
<th>Class Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st 1/24</td>
<td>(Briggs &amp; Peat, 1989) *Articles on Blackboard</td>
<td>Pre-course essay</td>
<td>Introduction: Creating a mindful field for learning and leading complex adaptive systems</td>
</tr>
<tr>
<td>2nd 2/7</td>
<td>(Castellani-Hafferty, 2009) *Articles on Blackboard</td>
<td>Reflection journal #1</td>
<td>Sociology and complexity science: A new field of inquiry Group presentation #1: Castellani, et.al</td>
</tr>
<tr>
<td>3rd 2/21</td>
<td>(Hazy, Goldstein, &amp; Lichtenstein, 2007) *Book chapters &amp; journal Articles on Blackboard</td>
<td>Reflection journal #2</td>
<td>Leadership cognition: a conceptual foundation for leading Group presentation #2: Hazy, et.al</td>
</tr>
<tr>
<td>4th 3/7</td>
<td>(Uhl-Bien &amp; Marion, 2008) *Articles on Blackboard</td>
<td>Reflection journal #3</td>
<td>Complexity leadership Group presentation #3: Uhl-Bien, et.al</td>
</tr>
<tr>
<td>5th 3/21</td>
<td>(Axelrod, 1997) *Articles on Blackboard</td>
<td>Reflection journal #4</td>
<td>Emergence: from chaos to order Group presentation #4: Axelrod Project proposal presentation (all)</td>
</tr>
<tr>
<td>6th 4/4</td>
<td>(Holland, 2012) *Articles on Blackboard</td>
<td>Reflection journal #5</td>
<td>Embracing chaos &amp; complexity Group presentation #5: Holland</td>
</tr>
<tr>
<td>7th 4/11</td>
<td>*Book chapters &amp; journal Articles on Blackboard</td>
<td>Reflection journal #6</td>
<td>Complexity modeling and design Café conversation</td>
</tr>
<tr>
<td>8th 4/25</td>
<td>*Book chapters &amp; journal Articles on Blackboard</td>
<td>Reflection journal #7</td>
<td>Celebrate learning Capstone Project presentations (all)</td>
</tr>
<tr>
<td>5/2</td>
<td>Learning portfolio &amp; Capstone project paper</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Journal articles or book chapters posted in Blackboard Course Document folders
**Required Books**


**Recommended Readings (selected chapters on Blackboard)**


Davies, P. *Cosmic blueprint: New discoveries in nature's creative ability to order the universe*.


**Suggested Special Interest Readings**


