

ISE 5015 MANAGEMENT OF CHANGE, INNOVATION, AND PERFORMANCE IN ORGANIZATIONAL SYSTEMS I

*Course Syllabus for Fall Semester 2014
Tuesdays and Thursdays 2:00 - 3:15 p.m.
Whittemore 518*

INSTRUCTOR

Dr. Navid Ghaffarzadegan, Assistant Professor

Grado Department of Industrial and Systems Engineering

Office: 231 Durham Hall; E-mail: navidg@vt.edu.

Office hours: Tuesdays 3:30-5:30pm, and other times by appointment. Office hours may need to change some weeks -- any changes will be communicated via email and/or on course Web site.

Course website: Scholar will be used as the online course environment for this course.

REQUIRED TEXTS

1. Kotter, J.P. (1996; 2010). *Leading Change*, Harvard Business Review Press: Boston, MA.
2. Leonard, D. and McGuire, M. (2007). *The Executive Guide to Understanding and Implementing the Baldrige Criteria: Improve Revenue and Create Organizational Excellence*, American Society for Quality Press: Milwaukee, WI. [Available only in online version]
3. Senge, P. (1990). *The Fifth Discipline: The Art & Practice of The Learning Organization*
4. Sheffi, Y. (2005). *The resilient enterprise: overcoming vulnerability for competitive advantage*. MIT Press Books.
5. Two Harvard cases, which can be purchased from <http://hbsp.harvard.edu/list/hbr-case-study>

Available at no cost:

6. National Institute of Standards and Technology, *Malcolm Baldrige National Quality Program 2011-12 Criteria for Performance Excellence (Business/Non-Profit)*, Gaithersburg, MD: United States Department of Commerce. Available at:
http://www.nist.gov/baldrige/publications/archive/2011_2012_business_nonprofit_criteria.cfm
7. Additional readings. These are identified on the detailed class schedule and students will either download readings as pdf's from the course Web site or acquire them electronically using the VT Library or other sources (e.g., GoogleScholar).

COURSE LEARNING OBJECTIVES: The focus of this course is on management, organizational improvement and change. This course emphasizes the role of management systems in organizational and process improvement approaches using a holistic systems perspective and engineering design approach. The course provides the opportunity for students to investigate recent and emerging concepts, principles, and practices. The course has a mix of theory and concepts, along with application and tools.

Upon successful completion of this course, students should be able to:

- Identify and describe the most significant challenges faced by organizations across various sectors in today's global environment;
- Understand theoretical foundations of organizational learning and change.
- Evaluate an organizational system by analyzing the maturity, alignment, and design effectiveness of management systems using an integrated performance excellence framework;
- Apply various quantitative and qualitative organizational assessment tools to diagnose, analyze, and improve management systems and organizational improvement approaches;

- Design (or redesign) an organizational improvement approach to meet desired performance requirements and reduce risk of failure;
- Identify research relevant to the topics addressed in the course using a variety of resources, analyze/critique this research, and interpret the practical implications of research findings; and
- Effectively communicate the concepts, applications, and current research related to this course in written, oral, and visual means.

METHOD OF GRADING:

Assignment	Type of Assignment	Weight in Overall Course Grade
1. Three Essays	Individual	3 times 15%
2. Weekly Quizzes (8 out of 10)	Individual	20%**
3. Research Paper	Individual	35%**
4. One optional assignment as a bonus	Individual	extra 3%

* Weekly quizzes measure your class attendance and before-class preparation. They are simple multiple choice questions. The goal is to make sure that we are prepared for the class. Every Tuesday, we will have quizzes (total of 10). Your 8 highest scores will be considered in your final grade.

** The grade for *research paper* is broken down to proposal (10%), presentation (10%), final report (15%). The final paper is due on the official exam date: **December 18th, 2013, 4:00 PM**. Email it.

Further detail and due dates for all assignments will be provided on the course Web site.

CLASS TOPICS

The following list defines the topics covered in this course and in which sequence. The detailed class schedule identifies reading assignments and specific dates associated with overall topic area.

- Course Overview
- Implications and Challenges of a Global Environment
- Fundamental Models/Concepts in Organizational Improvement
- Organizational Learning
 - Learning Organizations and the Disciplines
 - Theories of Learning
 - Workforce (Human Resource) Development
- Organizational Change
 - Process of Designing and Managing Change
 - Theories of Change
- Organizational Learning and Change in Supply Chains
- Malcolm Baldrige National Quality Award: Background and Criteria
 - History and Background
 - Overview of Criteria for Performance Excellence (CPE)
 - How Organizations Use the CPE
 - Performance Measurement

INSTRUCTOR EXPECTATIONS: The following define what is expected of students in this course:

- To attend class prepared – be aware of all assignment due dates, including reading assignments, and read assigned materials *before* class.
- To participate in class discussions.
- To manage the learning process - seek clarification and feedback if needed.

- To complete assignments on time* and in a professional manner.
- To demonstrate courtesy and respect to peers and instructor by arriving on time, turning off or silencing cell phones, using laptops only for course work during class, and remaining attentive and focused during class.
- To demonstrate academic integrity and honesty at all times by adhering to the Virginia Tech Honor Code (see below).
- To adhere to the Virginia Tech Principles of Community at all times (see below).

* No late work for any assignments will be accepted without prior notification and request to the instructor.

HONOR CODE: All students must adhere to the Virginia Tech Honor Code for all assignments in this course, including out-of-class assignments that are part of the course grade. Any suspected violations of the Honor Code will be reported to the honor system. Honesty in your academic work will develop into professional integrity. The faculty and students of Virginia Tech will not tolerate any form of academic dishonesty.

PRINCIPLES OF COMMUNITY: Virginia Tech is a public land-grant university, committed to teaching and learning, research, and outreach to the Commonwealth of Virginia, the nation, and the world community. Learning from the experiences that shape Virginia Tech as an institution, we acknowledge those aspects of our legacy that reflected bias and exclusion. Therefore, we adopt and practice the following principles as fundamental to our on-going efforts to increase access and inclusion and to create a community that nurtures learning and growth for all of its members:

1. We affirm the inherent dignity and value of every person and strive to maintain a climate for work and learning based on mutual respect and understanding.
2. We affirm the right of each person to express thoughts and opinions freely. We encourage open expression within a climate of civility, sensitivity, and mutual respect.
3. We affirm the value of human diversity because it enriches our lives and the University. We acknowledge and respect our differences while affirming our common humanity.
4. We reject all forms of prejudice and discrimination, including those based on age, color, disability, gender, national origin, political affiliation, race, religion, sexual orientation, and veteran status. We take individual and collective responsibility for helping to eliminate bias and discrimination and for increasing our own understanding of these issues through education, training, and interaction with others.
5. We pledge our collective commitment to these principles in the spirit of the Virginia Tech motto of Ut Prosim (That I May Serve).

ACCOMMODATIONS: Students are encouraged to address any special needs or special accommodations with me during the first two weeks of the semester, or as soon as you become aware of your needs. Those seeking accommodations based on disabilities should obtain a Faculty Letter from the Services for Students with Disabilities office.

ACKNOWLEDGMENTS: Professors Eileen Van Aken (VT), Hazhir Rahmandad (VT), and John Carroll (MIT) have significantly contributed to this course by providing their experiences and materials from the previous offerings of the course.

Course Outline:

Note for readings: **K** = Kotter, J.P. (1996; 2010). *Leading Change*, **LM** = Leonard, D. and McGuire, M. (2007)., **Se** = Senge, P. (1990), **Sh** = Sheffi, Y. (2005), NIST = National Institute of Standards and Technology. Other readings are journal articles or short news mostly available through the link provided. There are four Harvard cases that need to be purchased online.

W1: Aug 26, 28

Introduction / Management in general 1 (Case study), *No quiz.*

Reading:

- Case for August 28: Nordstrom: Dissension in the Ranks? (A) (Purchase from HBS website; <http://hbsp.harvard.edu/list/hbr-case-study>; \$6.93)

W2: Sep 2, 4

Management in general 2: Three lenses, Internal and external forces

Reading:

- Review the case from August 28 (Nordstrom)
- Carroll, J. S. (2006). Introduction to Organizational Analysis - The Three Lenses. Cambridge, MA: MIT Sloan School [Download from scholar]
- Bloomberg Editors. 2013. Will Robots Take All Our Blue-Collar Jobs? Available at <http://www.bloomberg.com/news/2013-08-13/will-robots-take-all-our-blue-collar-jobs-.html>
- Rotman D., 2013. How Technology Is Destroying Jobs, *MIT Tech Review*, <http://www.technologyreview.com/featuredstory/515926/how-technology-is-destroying-jobs/>

W3: Sep 9, 11

Organizational learning 1: Basics, Personal Mastery, Mental Models, Shared Vision, and Team Learning

Reading:

- Se (Ch1, 8, 9, 10, 11)

Written works due (Sep 11):

- Essay 1

W4: Sep 16, 18

Organizational learning 2: Systems Sciences, Systems thinking, Common Organizational Archetypes

Reading:

- Se (Ch4, 5, 6, 7, & Appendix 2)

W5: Sep 23, 25

Organizational learning 3: Contemporary theories, Inter-organizational learning, Case study

Reading:

- Ghaffarzadegan, et al. 2012. Complex Governmental Projects and the Challenge of Shared Understanding.
<http://www.navidg.com/papers/AOM.pdf>

- Garvin, Edmondson, & Gino (2008), Is Yours a Learning Organization?
<http://provost.tufts.edu/celt/files/Is-Yours-a-Learning-Organization-by-Garvin-Edmondson-and-Gino.pdf>
- Schein, E. H. (1996). Three cultures of management: the key to organizational learning. *Sloan Management Review*, 38(1), 9-20.
<http://sloanreview.mit.edu/article/organizational-learning-the-key-to-management-innovation/>

Written works due (Sep 30):

- Optional essay

W6: Sep 30, Oct2

Change Management 1: Why Transformation Efforts Fail, Fundamental Models/Concepts, Leading Change

Reading:

- K (Ch3-10)
- Weick & Quinn (99)

Written works due (Oct 2):

- Essay 2

W7: Oct7, 9

Change Management 2: Cases of change, Contemporary theories of change, Challenges of a Global Environment

Reading:

- LM (1-4)
- Bailyn, Fletcher and Kolb, (1997), “Unexpected Connections: Considering Employees’ Personal Lives can Revitalize Your Business,” *Sloan Management Review*.
- Hochschild, A. R. (2005). On the edge of the time bind: Time and market culture. *Social Research: An International Quarterly*, 72(2), 339-354.
- Van Maanen, J. (2006). Rediscovering Japan: some thoughts on change and continuity in traditional Japanese careers. *Career Development International*, 11(4), 280-292.
- Case: Shook, J. (2010). How to change a culture: Lessons from NUMMI. *MIT Sloan Management Review*, 51(2), 42-51.

W8: Oct14, 16

Change Management 3: Change in public sector; Cases of US Healthcare reform and Education reform

Reading:

- Gruber, J. (2011). *The Impacts of the Affordable Care Act: How Reasonable Are the Projections?* (No. w17168). National Bureau of Economic Research. Available at <http://economics.mit.edu/files/6829>
- Peterson, P.E. (2013) The Obama Setback for Minority Education – WSJ. Available at http://online.wsj.com/article/SB10001424127887323681904578641733715786100.html?mod=WSJ_Opinion_LEADTop [email Navid if you cannot download it]
- Hird, M. (2013) MS Thesis at MIT – Download from scholar.

Written works due (Oct 16):

- One page Research proposal

W9: Oct 21, 23	Presentation of research proposals. <i>No quiz.</i> <u>Reading:</u> <ul style="list-style-type: none"> • None.
W10: Oct 28, 30	Systems, Learning, Change, and Resilience in Supply Chains <u>Reading:</u> <ul style="list-style-type: none"> • Sh (the whole book) • Watch http://video.mit.edu/watch/the-resilient-enterprise-overcoming-vulnerability-for-competitive-advantage-9980/
W11: Nov 4, 6	Detailed design, Process improvement 1: Balanced Scorecard, Road-mapping <u>Reading:</u> <ul style="list-style-type: none"> • Kaplan and Norton (1992). The Balanced Scorecard, Harvard Business Review. Available at www.marketmatch.com/content/download/1075/6422/ • Kaplan and Norton (2000). Having Trouble with Your Strategy? Then Map it, Harvard Business Review, Available from http://new.dixie.edu/business/File/Christensens/MGMT%206400/HavingTroubleWithStrategyThenMapIt.pdf
W12: Nov 11, 13	<u>Nov 11: NO Class. No quiz.</u> Nov 13: Detailed design, Process improvement 2: Criteria for Performance Excellence <u>Reading:</u> <ul style="list-style-type: none"> • NIST (pp. 1-88)
	<u>Written works due (Oct 2):</u> <ul style="list-style-type: none"> • Essay 3
W13: Nov 18, 20	Detailed design, Process improvement 3: Baldridge; Criteria for Performance Excellence <u>Reading:</u> <ul style="list-style-type: none"> • Review NIST (pp. 1-88) • Case: Wainwright Industries (A): Beyond the Baldridge (Purchase from HBS website; http://hbsp.harvard.edu/list/hbr-case-study; \$6.93)
W14: Nov 25, 27	Thanksgiving! <i>No quiz.</i>
W15: Dec 2, 4, 9	Project presentation. <i>No quiz.</i> <u>Written works due (Dec 18):</u> <ul style="list-style-type: none"> • Project report/paper