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APS 1010 Cognitive and Psychological Foundations of Effective Leadership
Prof. Robin Sacks

Course Description

This course investigates the cognitive and psychological foundations of effective leadership. Students will explore current theories driving effective leadership practice including models of leadership, neurophysiological correlates of leadership and psychodynamic approaches to leadership. Students will learn and apply skills including mental modeling, decision-making, teamwork and self-evaluation techniques. This course is aimed at helping Engineering students to gain practical skills that will enhance their impact as leaders throughout their careers.

Course Outline

Week	Module	Topic
1	1: Cognitive Foundations of Effective Leadership	Mental models Part 1: Assumptions
2		Mental models Part 2: Mapping models
3		Mental models Part 3: Models of leadership
4		Dynamic systems and leadership
5		Rethinking feedback: Single and double loop learning systems
6		Integrative Thinking Part 1: Decision making in ambiguous situations
7	2: Psychological Foundations of Effective Leadership	Beliefs, stance and story
8		Barriers to effective leadership
9		Leadership styles and Emotional Intelligence

10		Integrative Thinking Part 2: Stance
11		Wisdom, intelligence & creativity synthesized
12		Group presentations

Assignments

1. Team Assignment –class presentations, progress memos and feedback forms
2. One personal response paper (about 3 pages)

Reading List (subject to modification)

I will post all readings on the course's Blackboard site

Sterman, All models are wrong: Reflections on becoming a systems scientist. *Systems Dynamics Review*. 18(4) pp.501-531.

Johnson, Homer, J (2008) Mental models and transformative learning: The key to leadership development? *Human Resources Development Quarterly*, 19(1) pp. 85-89.

Arjyris, C. (1994). Good communication that blocks learning. *Harvard Business Review*. July-August 1994, pp.77-85.

Argyris, C. (1991) Teaching smart people how to learn. *Harvard Business Review*. May-June 1991. pp. 99-109.

Heifitz, R. & Laurie, D. (1997). The work of leadership. *Harvard Business Review*. January-February 1997, pp.124-134.

Williams, G. & Miller, R. (2002). Change the way you persuade. *Harvard Business Review*. May 2002, pp.65-73.

Goleman, D. (2000). Leadership that gets results. *Harvard Business Review*. March-April 2000. pp. 1-15.

Dweck, C. (2008). Can personality be changed? The role of beliefs in personality and change. *Current Directions in Psychological Science*. 17(6) pp. 391-394.

Sternberg, R. (2008). The WICS approach to leadership: Stories of leadership and the structures and processes that support them. *Leadership Quarterly*, 19 pp.360-371.

Farris, G.F. & Cordero, R. (2002). Leading your scientists and engineers. *Research technology management*. November-December 2002. pp 13-25.

Grading Scheme

Attendance and Engagement	15%
Personal Reflection Paper	25%
Midterm Exam (take-home)	20%
Team Assignment	20%
Final Exam	20%