

Integrative Management Development – Project Preparation (Required for Technology and Management Program) ME/MGT 4741

Catalog Description:

Prerequisites: 1 year in Technology and Management Program

Individual and group-based experiential learning activities to develop integrated human system management skills that prepare students for more successful capstone collaboration and learning.

Textbook:

The Geek Gap: Why Business and Technology Professionals Don't Understand Each Other and Why They Need Each Other to Survive, Bill Pfleging and Minda Zetlin

Topics Covered:

1. Management of Self
2. Context and Choice
3. Systems thinking
4. Relationship Management
5. Teamship (Peers, Subordinates)
6. Communication
7. Negotiation and Conflict Resolution
8. Defining Success at different levels: individual, team, organization, network
9. Courage, moral leadership and ethical dilemmas
10. Social Architecture

Course Outcomes:

Outcome 1. To equip students with the skills needed to succeed in a professional business environment.

Outcome 2. To provide students with an opportunity to develop their writing and presentation skills needed to communicate their ideas and suggestions.

Outcome 3. To enable students to gain experience working in multi-disciplinary teams, to understand the different roles in such teams, and to develop conflict negotiation skills.

Contribution of course to meeting the requirements of Criterion 5.

T&M Pre-Capstone												
	Mechanical Engineering Program Educational Outcomes											
Course Outcomes	a	b	c	d	e	f	g	h	i	j	k	l
Course Outcome 1				X		X		X		X		
Course Outcome 2				X		X	X	X		X		
Course Outcome 3				X		X		X		X		

Prepared by: Mark Ferguson

Expanded Outline

Possible Simulated Learning Experiences

Peak Performance- Reach for the Summit
Peak Performance- Mount Everest
SimuLearn: Virtual Leader

Possible Texts

The Geek Gap: Why Business and Technology Professionals Don't Understand Each Other and Why They Need Each Other to Survive, Bill Pfleging and Minda Zetlin
The Leadership Experience, 4th ed, Richard L. Daft
The 5th Discipline, Peter Senge
Lucifer Effect, Philip Zimbardo

Topical Outline

Management of Self

Awareness of Self; Self Insight; Personal Competencies
Personal Assessments such as MBTI
Values Assessments
Culturally Implicit Leadership Behaviors (schemas)
Feedback (seeking, avoiding, mitigating)

Context and Choice

Lucifer Effect
Individual and situational contexts
Ambiguity and uncertainty
Organizational dynamics
Social structure

Systems thinking

Personal Mastery
Mindset
Shared Vision
Team Learning
Integration and Change

Relationship Management

Leadership Practices (LPI, Kouzes and Posner)
Mind and Heart; Thinking and Feeling (Blink)
Envisioning Alternative Futures (Heifetz)
Power and authority
Developing others
Listening
Communities
Influence
Upward Influence
Responsibility
Networking skills

Teamship (Peers, Subordinates)

Empowerment
Virtual teams
Global teams
Interdisciplinary teams
Trust
Feedback
Shirking
Becoming a team
Co-opetition
Diversity

Communication

- Across culture, across gender, across skills
- Stories and metaphors
- Writing, speaking, presentation
- Values based decision making

Negotiation and Conflict Resolution

- Issue Selling, Influence and Persuasion
- Distributive and Integrative bargaining
- Conflict Styles (Thomas Kilmann)

Defining Success at different levels: individual, team, organization, network

- Creativity and Innovation
- Performance
- Economic, Social, Environmental
- Individual, Team, Organizational, System
- Diversity and group think
- Strategic Sustainability

Courage, moral leadership and ethical dilemmas

- Voicing Values (selections from Aspen Institute Business and Society Program)
- Creating Value:balancing social, environmental and economic value

Social Architecture

- Creating vision, strategic direction, culture, values and change

Course Requirements

Individual Journal and Reflection Paper

Each student is encouraged to maintain an individual journal during this course to capture insights and learning relative to leadership, teamwork, values and systemic thinking. Students will need to keep individual journals for the team simulations and exercises. The journals and additional reflections on their assessments and experiences during the class form the basis for a final reflection paper for each team project.

In addition, students will be asked to write several 1-2 page reflections on mind sets that influence the processes and outcomes involved in team products. A poster session for communication and learning from each other will also be required for one of the individual assignments.

Team Paper

Students will be assigned to teams for the simulations and exercises. These teams will collaborate on a team paper. In addition to the team paper, each team must submit an executive summary that will be distributed to all students to read prior to the class meeting when they will be discussed. Teams will be expected to be prepared to answer question pertaining to the lessons learned from the simulations and expressed in their group as they are called upon in subsequent classes by instructors as well as being questioned by other teams. The presentation should incorporate elements of leadership, interdisciplinary collaboration, and strategy found in the courses, readings, business news, and class discussions. A Peer Evaluation from each member of the team is a required component of the team paper, whereby students will evaluate their team members on a number of different dimensions such as participation, initiative, attitude, contribution, leadership and communication.

Course Grading Policy

Grading and deliverables

The professors view the students as an integral component of the learning environment and expect students to come to class prepared to discuss the assigned readings and cases. The skills and knowledge necessary for interdisciplinary collaboration are broad and expanding rapidly. As such, students will be expected to search for relevant stories and examples of barriers/facilitators and outcomes of such in the media and other channels that are focused on the topics discussed in class. Evidence of this investigation can be demonstrated through active participation in class discussion, written assignments and team projects.

A portion of the grade for this course will be determined by the student's demonstrated attention and engagement in the course and its activities. Peer evaluations will be taken into consideration as a component of the individual's grade for team projects and presentations.

1. Individual Essays, Poster Sessions, Individual Assessments and Class Participation/Engagement –50% (attendance and engagement in discussions and learning, written insights about mind sets represented in assessment instruments, quality of the essays, and scanned media sources of information brought to the class)
2. Team Projects – 50% (25% x 2 assignments)
Team member assessments forms are required