### MIE459 – Organizational Design.

### **Course Description:**

This course examines how engineers as managers can create more effective organizations. We focus on the following areas for improving organizational effectiveness:

- > The role of Management in Organizational Design
- Organizational Design and Business Strategy
- ➤ Alternative organizational structures, such as functional, divisional, geographic, matrix, and horizontal structures
- > Techniques for managing an organization's dependencies on its external (resource) environment
- ➤ Manufacturing and Service Organizations
- > Managing Technology in organizations
- > Conflict, power, and politics within an organization
- > The role of innovation, managing change and organizational learning.

Our perspective is based on past research and hands on practice in the management of organizations.

### **Course Learning Outcomes**

Upon completion of this course, the student will be able to:

- ➤ Understand the major perspectives and research paradigms of organization theory
- Evaluate the role of formal and informal networks within organizations
- > Assess how organizational structure varies under different external and internal circumstances
- ➤ Assess how organizations can manage their external environment and adjust their organizational structure
- Examine the role of organizational structure (both formal and informal) in hindering and helping organizational innovation
- > Identify methods to enhance knowledge sharing and idea development.

### **Course Structure and Content:**

Organizational Theory and Design is divided into five themes and 12 modules:

- ➤ Part 1 Introduction to Organizations
- ➤ Part 2 Organizational Purpose and Structural Design
- ➤ Part 3 Open System Design Elements
- ➤ Part 4 Internal Design Elements
- ➤ Part 5 Managing Dynamic Processes

#### **Course Books and Optional Academic Papers**

We have adopted as the core book (Professor Richard Daft / Ann Armstrong textbook on Organizational Theory and Design – Canadian  $2^{nd}$  edition – a  $3^{rd}$  edition has been

published). Note – Ann Armstrong is not related to me in any way – never met her. This book will provide breadth. There are two additional books (optional) for the course that will provide depth. 1) Engineering and Product Development Management – The Holistic Approach (Cambridge University Press, 2005), and 2) Sustaining Continuous Innovation Through Problem Solving (Industrial Press, New York 2008) Full disclosure: I wrote both of these books.

### **Course Grading:**

Online Discussions by Module – Online Discussion By Team (Blackboard)	10%
Mid Term Exam (MCQ and essay questions)	30%
Final Exam (MCQ, essay type questions and Case Study)	40%
Final Team Report (20%) includes Charter 5% and 5% PPT presentation	20%

The course will be taught through a combination of lectures (35-50 minutes), core book readings and case studies, case studies from instructor experience, in-class and online discussion.

#### Online Discussions (Overall 10%).

- Students have been randomly placed into a group of 6 in order to simulate "real-world" experience, as professionals often do not have the choice to select their group members.
- "Group Composition" PDF has been

posted to Blackboard under "MIE459 Important Docs" -> "MIE 459 Group Composition"

- You are responsible for **contacting** your group members as soon as possible.
- Each group has been assigned a "scribe" who will post on behalf of his/her group.
- Only the "scribe" may post on behalf of his/her group. Posts from other group members will be ignored.
- The "scribe" will write their Group # and the 3 questions that they are answering on the "subject line". For example: "Group 1 Questions 3, 4, 5".
- The <u>same</u> "Group Composition" will be used for <u>both</u> "Online Discussions" and "Team Project Report"
- Group composition MAY change. You are responsible for monitoring any changes. Updated "group composition" will be posted as students are added to the course or when students drop the course.
- Please review the "Group Composition" asap as additional information is noted on the actual PDF.
- Grades will be assigned on a weekly basis as 0 (no submission), 1 (submission with minimal substance), 2 (submission with some reflective thinking), and 3 (submission with higher level thinking). Please Note-Mid Term & Final Exams relate to the online discussion content.

### Mid Term Exam - Overall 30% (Based on Modules 1-6).

- Multiple choice 20 questions @ 1 marks each = 20 marks (20%)
- Essay answer four questions out of six (a) 20 marks each = 80 marks (80%)

<u>Final Exam – Overall 40% (Based on Modules 7-13).</u> The exam consists of three sections. The first section consists of multiple-choice questions (24%). The second section (40%) requires you

to answer five of seven essay type questions. The third section (36%) requires you to analyze an integrated case study – you will be given the case to **read 2 days before the exam**.

<u>Team Project Report – Overall 20%.</u> The final team report can be any subject in organizational design that interests you. Please check the web site for previous projects: <a href="http://amgimanagement.com/teaching/">http://amgimanagement.com/teaching/</a>

Reminder: The same "Group Composition" will be used for both "Online Discussions" and "Team Project Report"

The goal of the final project report is <u>not</u> to do original field research, but to demonstrate to me your ability to apply organizational theory and design *in a situation of your choosing*. **The Project team report should be limited to 6,000 words**, double-spaced, 12 point font, (approximately 1,000 words per student). Teamwork is an essential element of organizational design. A hard copy and a soft copy of the paper (Adobe Acrobat PDF!) must be delivered by email no later than xxx at 4pm to my email address, <u>stephenc.armstrong@utoronto.ca</u> - the hard copy to be given to the mechanical & industrial engineering undergraduate office (Carla Baptista or Brandon Wells)

### **Important Dates (Subject to Change):**

- Orientation, Course Overview & Planning
- Project Team Charter deliver-hard copy inclass and e-copy
- > Reading Week No Classes
- ➤ Mid Term Exam (Mods 1-6) Noon 2PM Exam Room 100
- ➤ Teams 1-9 Final Team Report Presentation (Room MC254) email PPT 2 days before the presentation
- Last inclass lecture
- (e-version midnight) Submission of final team project report Electronic versionemail to instructor
- Submission of the Team report physical hard to the undergraduate MIE office (Carla Baptista).
- Final Exam (Mods 7-13 plus Integrated Case Study). Exam Room to be announced
- > All coursework grades submitted

# Part 1 – Introduction to Organizations

#### Week 1- Mod 0 – Orientation

- > Overview of the entire course how we will cover course content in breadth and depth
- ➤ Course Value in Career Planning
- ➤ Mechanics of the Course including:
  - Project team formation and operation
  - Course Book Assignment Planning and Requirements
  - Grading structure (Critical Reviews, Book Review, Discussions, Projects)
  - Web site layout and operation, Important Dates
  - Purpose of Primers and Academic papers
  - Critical Thinking and Performance Rubric

### Week 1 - Mod 1 – Introduction to Organizations and Organizational Theory

- ➤ What is an Organization?
- > Types of Organization
- Dimensions of Organization Design
- > Evolution of Organization Theory
- ➤ Reflection & Practices Air Canada, Ellis Don, Tim Hortons, Mackenzie Valley Gas Pipleine, Cementos Mexicanos, MOCCA
- ➤ Cases –Teleflex Canada

# Part 2 – Organizational Purpose and Structural Design

### Week 2- Mod 2 - Strategy, Organizational Design and Effectiveness

- > Strategic Direction
- Organizational Purpose
- > Strategy and Design
- Organizational Effectiveness
- Reflection & Practices Tim Hortons, West Jet, Loblaws
- Cases Jones Soda, Foldable Show Maker
- ➤ Applied Case Study Lecture Strategy Directional Planning Boeing Division

### Week 3 Mod 3 – Organizational Structure

- Organizational Structure Overview
- > Impact of Information Flow on Structure
- Org Design Alternatives
- Functional, Divisional and Geographic Designs
- Matrix Structure, Horizontal Structure, Virtual Networks, Hybrid Structures
- > Applications of Structural Design
- Reflection & Practices Desjardins Group, Ford Motors, Imagination Ltd, Medecins sans Frontiers, Englander Steel, Chemainus Sawmill, Micrsoft Corp
- Cases Aquarius Adverting Agency, Eva's Phoenix Print Shop
- ➤ Applied Case Study Lecture Messier Dowty Landing Gear

## Part 3 – Open System Design Elements

#### Week 4 - Mod 4 - External Environments

- > Environmental Domain
- > Environmental Uncertainty
- > Adapting to Uncertainty
- Framework for Org Responses to Environmental Uncertainty
- > Resource dependence
- ➤ Controlling Environmental Resource
- ➤ Reflection & Practices Nokia, Ogilvy & Mather, Joe Fresh, Manitoba Telcom, Walmart, TSX Group, Montreal Exchange
- ➤ Cases Nokia, Acme and Omega Electronics, Vancity

### Week 5 - Mod 5 - Inter-organizational Relationships

- Organizational Ecosystem
- > Resource Development and Power Strategies
- ➤ Collaborative networks Partnering
- ➤ Population Ecology Ecological change and survival strategies
- > Institutionalism Internal and external view
- Reflection & Practices Toyota, Chapters, Indigo, Joe Fresh, Bombardier, Apotex, Walmart, Shazam
- Cases- Apple, Hugh Russel Inc

### Week 6- Mod 6 - Designing Organization for International business

- > Entering the Global Arena
- Designing Structure to Fit Global strategy
- > Building Global Capabilities
- Cultural Differences in Coordination and Control
- > The Transnational Model of Organization
- ➤ Reflection & Practices Alcan, Brandaid, ABB, McCain Foods, Sony
- Cases Ivanhoe Mines, The "Pianistic Other" in Shnezhen

# **Part 4 – Internal Design Elements**

### **Week 7 - Mod 7 - Manufacturing & Service Technologies**

- Core Business Process- Manufacturing Technology Strategy
- Advanced Manufacturing Systems CIM, FMS, Lean, etc.
- > Service Technology
- > Support Technology
- > Department Design
- ➤ Workflow Across the Enterprise
- > Impact of Technology on Job Design (Socio Technical Systems)
- Reflection & Practices General Electric Quebec, Maple Leaf Foods, Doepker, Garrison Guitars, Dell, Home Depot, Aravind Eye Hospital, Sports Teams, Pret a Manager
- Cases –Bistro Technology, Metropolitan College

## Week 8 - Mod 8 - IT and E Business Information Technology Evolution

- > IT technology Evolution
- > IT for decision for making and control
- Adding Strategic Value: Strengthening Internal Coordination
- ➤ Adding Strategic Value: Strengthening external relationship
- > IT impact on Organizational Design
- Reflection & Practices "Mr Fix- it", Brampton Hospital, eBay, Ontario Hospital Assoc, Reflection & Buy, Montgomery Watson Harza, Northern Blue Publishing
- Cases –e-Bay, Product X

### Week 9- Mod 9 - Org Size Lifecycle & Decline

- Organizational Size is bigger better
- Organizational Life Cycle
- Organizational Bureaucracy
- > Bureaucracy in Changing World
- Organizational Control Strategies
- Organizational Decline and Downsizing
- Reflection & Practices Interpol, Grackle Coffee Group, United Parcel Service, Imperial Oil, Dofasco, Labatt Brewing, Eatons
- ➤ Cases –Daily Grind Coffee Inc, I Love Rewards Inc

# **Part 5 – Managing Dynamic Processes**

### Week 10- Mod 10 - Organizational Culture & Ethics

- ➤ What is Organizational Culture?
- Organizational Design and Culture
- > Organizational Culture, Learning and Performance
- > Ethical Values and Social Responsibility
- > Sources of Ethical Values
- ➤ How Leaders Shape Culture and Ethics
- > Organizational Culture and Ethics in a Global Environment
- ➤ Reflection & Practices Birks & Mayors Inc, Sandvine, Mountain Equipment, West Jet, Lululemon, Telus,
- > Cases –Gap Healthcare Group, Queens University Canada

## Week 11 - Mod 11 - Innovation and Change Management

- ➤ The Strategic Role of Change and Innovation
- > Elements for Successful Change
- ➤ New Products and Services
- > Strategy and Structural Change
- Cultural Change
- > Strategies for Implementing and Managing Change
- ➤ Reflection & Practices Toyota, Google, Cirque du Soleil, Pratt & Whitney Canada, Procter & Gamble, West Jet Airlines Ltd
- ➤ Cases Toyota Motors, Defence Research development, Osoyoos Band

## **Week 12- Mod 12 - Decision Making Process**

- Individual Decision Making
- Organizational Decision Making
- ➤ The Learning Organization
- > Contingency Decision Making
- Decision Making in Complex Environments (high velocity, mistakes, escalation)
- Reflection & Practices Anishinabek Nation, Alberta Consulting, Paramount Pictures, Gillette, Encyclopedia Britannica, Huckabees, Bombardier, Carnegie Mellon University Model

➤ Cases –The Big Carrot, Nackawic Community

#### Week 12 - Mod 13 - Conflict Power and Politics

- Socio Political Management
- > Intergroup Conflict in Organizations
- ➤ Power and Organization Development
- > Political Processes in Organizations
- ➤ Using Power, Politics and Collaborative Strategies
- ➤ Reflection & Practices Toronto Maple Leafs, Apotex, Liberal Party of Canada, Brotherhood of Locomotive "Engineers", Canadian Pacific Railway, Yahoo
- Cases Irving Dynasty, National Hockey League

### Weeks 12 and 13 – Final Team Report Powerpoint Presentation