

# **GBUS 865 and MBA 865 PROJECT MANAGEMENT**

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**Schedule:** 8:30 a.m. 4:30 p.m., Tuesday 21 February to Saturday 25 February 2017

Final Presentation approx three weeks later date tbd by class consensus.

There will likely be group work required in the evenings some days.

**Location:** Education Building, Room tbc

**Textbook:** Meredith, Jack R. and Samuel J. Mantel, Jr. <u>Project Management: A</u>

Managerial Approach (9th Edition). John Wiley & Sons, Inc., Toronto.

# **COURSE OBJECTIVES**

1. The purpose of this class is to introduce students to the many phases in a Project's Life Cycle and how to address challenges through an effective Project Management System.

- 2. Students will broaden their knowledge and understanding of Project Management Principles. (Since Project Management is both an art and science it will take many years of practice and education to become fully proficient.) From this course, students will be able to recognize critical project control points and realize the importance of addressing them appropriately in their future project work.
- 3. Students will learn how to monitor and maintain control of scope, time and costs within a project.
- 4. Students will broaden their understanding and recognize the importance of teamwork and become aware of the need for strong Human Resource Management in the development and access of projects.
- 5. Students will develop skills in creative and critical thinking as they question, discuss, research, and present throughout the duration of the course and in particular in the preparation and presentation of the Course Project.
- 6. Students will learn a variety of effective Project Management techniques that ease the role of a Project Manager and ensure successful projects.

# SEMINAR TOPICS PROJECT MANAGEMENT

#### **Definitions**

- project and project management
- owner, users, and stakeholders
- life cycle of a project

# **Establishing the Requirement**

- project initiation
- goals and objectives
- identifying and managing users and stakeholders
- managing scope changes

# **Establishing the Project Team**

- selecting project managers
- picking the project team members
- choosing an organizational structure

# **Clarifying the Requirement**

- consultation
- investigating alternatives
- selecting options
- preparing a conceptual plan

# Human Dimension of Project Management

- communication
- leadership versus management
- motivating team members
- managing conflict
- power and influence
- managing expectations

# **Project Design**

- architect and engineer service contracts
- managing a design team
- drawings and specifications
- value engineering

# **Scope and Time Control**

- work breakdown structure (WBS)
- planning and scheduling
- CPM/PERT/PRECEDENCE networks
- classes and accuracy of estimates

# **Project Implementation**

- procurement management
- construction management alternatives
- handling and hierarchy of contract documents
- · fast tracking and hyper tracking

## **Risk Management**

- risk identification
- risk control/mitigation
- insurance
- bonding

# **Project Termination**

- commissioning
- quality management
- project hand-over

# GBUS 865 and MBA 865 - COURSE PROJECT

## **RATIONALE**

Unlike many courses where a final exam is a measure of the student's mastery of topics, GBUS 865/MBA 865, Project Management uses an independent project--a project of the student's own development and related to his/her area of work--as the basis in part for determining both final grade and mastery of key project practices. Like the role of Project Manager, this project requires the interaction of a group of experts with a common goal.

The course project is developed so the student can track, in practice, what the course presents in concepts and application.

#### **GUIDELINES**

- 1. To simulate the real life formation of a Project Team, students can form their own groups. Groups should ideally be four to five in size. Efforts should be made to get a well-balanced group in all aspects (work experience, skills, abilities, group work styles, academic background, etc.,). The instructor has final approval of the appropriateness of the group size, structure, and membership.
- 2. Each group must submit their proposal for the project to be developed by them.
- 3. Four deliverables will be required, culminating in a final Project Presentation. Subject to modification the following deliverables are required:
  - 1. Project Team Composition and Proposed Project (not marked)
  - 2. Statement of Requirement
  - 3. Conflict Recognition Assignment
  - 4. Final Project Presentation
- 4. The group can choose an organizational structure most appropriate to their project. The group can assume that they are working as an in-house project team, external consultants, or a combination of either of these. Similarly, the project can be developed as a private corporation's undertaking or a public project (city, provincial, federal, crown etc.).
- 5. Groups may draw upon a project concept or <u>non-executed</u> project related to their work experience, providing these conditions are met:
  - a. The project has not been implemented to-date, nor is the project readied for implementation. Use of an implemented project would constitute an unethical practice, i.e. plagiarism. Studies related to an implemented project may be drawn upon. If so, document such use.

- b. The choice of the project does not involve disclosure of proprietary information or other such data of a proprietary nature peculiar to the organization; such information or data must be disguised or altered, if used at all. Alternately, permission to use the material by the organization must be obtained.
- 6. The project must be significantly complex to challenge the principles covered in the course. As such, the definition of a project developed in class will be used (i.e. the project must be unique, temporary, well defined, and complex).

#### **EXAMPLES OF POSSIBLE PROJECTS**

Addition to the Legislature Paddle Boat operation Wascana Lake Open a New Restaurant in town New Highway around Regina New Road into the University Hospital Fundraiser New research building on campus Nuclear Power for Saskatchewan Additional runway at airport New landfill site School Closures for Regina Major Corporate Re-engineering Installation of a New Computer System Implementing New Classification System Relocation of Corporate Offices New Domed Stadium

Construct Garbage Transfer Station Sewer system upgrade in City New barracks at RCMP Depot New Winter Sports Facility on campus New underground parkade New Golf Course in Regina New subdivision in town Dam on Wascana Creek Oil well on campus Geothermal research well on campus Amalgamation of Corporate Office **Business Merger** Implementing New Property Tax Implementing New Job Descriptions Marketing a New Football League New Heritage Fund Creation

# **ASSIGNMENTS 2 and 3**

7. Assignments 2 and 3 will each be worth 10% of the overall Course Project mark. All Project Team members will receive the same mark for this portion. Specific details regarding these assignments will be provided during the appropriate class lecture. Assignment 1, the selection of a team and project title is required by the end of the first day of classes.

#### PROJECT PRESENTATION

8. The group will have 20 minutes to present the group project. The focus of the presentation will be on selling both the project "need or opportunity" as well as the capabilities of the project team. In this regard, the team can assume that this "need or opportunity" and the team are one of many presentations to the "Board", each competing for limited funds and "Board" approval. The remainder of the class and instructor will assume the role of the Owner's Board of Director's who will be deciding whether the project is sufficiently developed to proceed to implementation.

We will determine a date for the group presentations during class. We will find a time on an evening, weekend, or during the day that works for the entire class. This will be decided by consensus and will be approximately three weeks after the termination of the lecture portion of the class on 25 February 2017.

- 9. The presentation will be judged for both its content and the professionalism of its presentation. The presentation shall be structured to ensure the participation of all Project Team members.
- 10. There will be 10 minutes for questions from the class members, instructor or special guests. Special guests from either within the University or externally may be invited
- 11. The presentation will form 30% of the overall Course Project Mark. All Project Team members will receive the same mark for this portion of the course.

#### SUMMARY OF COURSE PROJECT MARKING

Assignment 2	10%
Assignment 3	10%
Presentation	30%

# SUMMARY OF OVERALL COURSE EVALUATION

Class participation	10%
Research Paper	40%
Course Project (Assignments 2,3,4)	50%

# GBUS 865 and MBA 865 COURSE EVALUATION

# 1. CLASS PARTICIPATION

10%

Participation in class discussion throughout the course is expected of each student. An important part of the scope of the course deals with working as a group and team. An illustration of the student's ability to work as a team member is established through their positive participation in class as well as their participation on the Course Project. This mark will be based on the student's contribution in class, as a team member, and during the Project Presentation.

## 2. RESEARCH PAPER

40%

A 2000 word paper reviewing a "real world", completed project, describing the challenges experienced by the Project Manger in balancing scope, time and cost throughout the project. More details are provided separately. The Research Paper is to be submitted on 30 July 2007 (the date scheduled for class project presentations).

#### 3. COURSE PROJECT

50%

Details pertaining to the Course Project will be handed out as a separate guideline. The breakdown of marks for the course project specified in the guideline include 30% for the final presentation and 10% each for group assignments 2 and 3.

# **RESEARCH PAPER**

#### **RATIONALE**

Written and oral communications are essential tools of a Project Manager. The two major assignments in this course focus on these communication skills. The Course Project and Presentation require significant group work and oral discussion along with a final formal oral presentation. The individual assignments test written skills. The Research Paper also enables the student to practice written communication skills.

The Research Project is developed so that the student can review and report on a completed "real world" project, highlighting its successes and/or failures. The Research Paper will be due on the last day of classes (or a date to be determined by the class).

# **GUIDELINES**

The paper will be a minimum of 2000 words and no more than 2500 words. The main focus of the paper will be to identify and describe the challenges of the project in terms of the three primary objectives of Project Management (Scope, Time and Cost). It should discuss the interrelationship of these elements and how the Project Manager successfully or unsuccessfully managed them, trading off one versus the other within an environment of competition and conflict over limited resources. The paper does not have to discuss all phases or aspects of the project, but should identify sufficient components to illustrate the student's understanding of the challenges and importance of good project management.

## **EXAMPLES OF POSSIBLE RESEARCH TOPICS**

Montreal's Olympic Stadium
Grey Cup '95 or '03 or '13
Canada's Museum of Civilization
Avro Arrow
Summer Games Bid or Preparations
Titanic
Saskatchewan Centre of the Arts
Canary Wharf (London)
Chunnel Project
Computer Installation Project

Expo 86 (Vancouver)
Scott Tournament of Hearts '98
Wascana Lake Deepening
Montreal or Calgary Olympics
Confederation Bridge
Introduction of GST
Upgrader / Tar Sands Projects
Hospital Amalgamation
Company Reorganization
Introduction of a new product

Any major initiative that meets the definition of a project.

## **RESEARCH PAPER MARKING**

Content and argument 80% Presentation (grammar etc.) 20%

# GBUS865 & MBA865 PROJECT MANAGEMENT WINTER 2017 - COURSE PLANNER

LESSON	DATE	SUBJECT	HANDOUTS
#			
1	21 Feb 8:30 – 10:00	Introduction - to Instructor - to class members Overview of Course Course Objectives, Methodology Text to be used Evaluation Techniques Why Project management?	Course Planner Course Objectives Evaluation Techniques
2	21 Feb 10:15 – 11:15	Define Project Define Project Management Project Management Objectives (Scope, Time, Cost) Project Life Cycle Project Initiation (Identify Need, Problem, Opportunity)	- Course Project Guidelines  - "Chapter VIII Towards Successful Project Management"  - "Managing Small Projects"  - "The Project Office Phenomenon"  - "Third Party Project Management: A Coming Realty for an Increasingly Unrealistic World"
	21 Feb 11:15 – 1:00	Group Work and Lunch	This time should be used to establish groups for the group project and begin research on a topic for the overall group project
3	21 Feb 1:00 – 2:00	Project Initiation Selecting the Project Manager PM Responsibilities Leadership and Management	- "Selecting Project Managers: An Integrated List of Predictors" - "The Consultative Role of the Project Executive" - "Little Things Make the Biggest Difference"
4	21 Feb 2:15 – 4:00	A Walking Case Study of the University Centre Project, U of R	
	21 Feb 4:00 – 4:30	Group Work	This time should be used to establish groups for the group project continue research and clarification of the overall group project
	22 Feb 8:30	Assignment #1 Due – Identification of Teams and Group Project Selection	
5	22 Feb 8:30 – 10:00	Project Initiation Goals and Objectives Needs Analysis Statement of Requirement	Statement of Requirement (SOR) Preparation Guidelines - "Pre-Design Planning" - "Project Managers Are From <i>Mars</i> and Senior Management is From <i>Venus</i> " - "Expanding the Role of the Project Director as the CIO in the Information Technology

			Industry"
	22 Feb 10:15 – 11:00	Group Work – Statement of Requirements	This time should be used to establish groups for the group project and continue begin research on a topic for the individual research paper and for the overall group project. Work begins on the Statement of Requirements.
6	22 Feb 11:00 – 12:00	Organizational Structures Preferred Project Organization Management Relationships Identifying Users and Stakeholders	- "A Guide to the Project Management Body of Knowledge, pages 17-22" - "The Project Support Office. A Mechanism for Enterprise-wide Modern Project Management"
	22 Feb 12:00 – 1:00	Lunch	
8	22 Feb 1:00 – 2:00	Human Resources Management Selecting Project Team Members Team Building Situational Leadership "Lollipop Leadership" Motivating Team Members	Situational Leadership Handout by Leadership Studies Inc "How to Get Breakthrough Performance With Teamwork" - "Project Teams: What Have We Learned?" - "Cultural Project Management - Why the Japanese are First to Market With High-Tech Products"
9	22 Feb 2:15- 3:30	Case Study "Planning Project Situation" a test of Teamwork	
7	22 Feb 3:45 – 4:30	Project Planning Project Set-up Consultation - Owner, Stakeholders, Users Scope Control, Managing Stakeholders Investigating Alternatives Selecting Options Conceptual Plan	Evolution of Scope Stakeholders Requirements, Sample Checklist University Centre Complex, Program Requirement Study (sample) - "Fencing in Project Scope"
	23 Feb 8:30	Assignment #2 Due – Statement of Requirements for the Group Project	
10	23 Feb 8:30 – 9:30	Conflict Management Seven Sources of Conflict Five Ways of Settling Conflict "Principled" Negotiation Power Influence Communication Management	- "Openness: The Gateway to Top Performance" - "Virtually International - Managing Globalized Project Teams"  "Getting to YES - Negotiating Agreement Without Giving In" by Roger Fisher and William Ury
11	23 Feb 9:45 – 11:00	Negotiation Case Study (The Great Granny Smith)	
	23 Feb 11:00 – 12:00	Group Work – Conflict Assignment and Group Project	This time should be used to establish groups for the group project and continue begin research on a topic for the individual research paper and for the overall group project. Work

			begins on the Conflict Assignment.
12	23 Feb 1:00 – 2:30	Project Design Phase Service Contracts Scope of Services Fee Arrangements Value Management Work Breakdown Structure (WBS) Relating Organizational Structure and WBS	- "Choosing an Architect" (Harvard Business Review) - UofR Residence Project; Architect Assessment Form - Sask Association of Architects Fee Guideline - "The Value in Value Management: A Dialogue" - "On Today's Menu: 'The Italian Dinner Project' " - "Work Breakdown Structure for the Real Estate and Loan Escrow Operation Project, In- Depth Study"
13	23 Feb 2:45- 4:00	The Wedding Planner. In class Case Study, WBS for a Wedding	
	23 Feb 4:00 – 4:30	Group Work –	This time should be used to continue work on the group project and group assignments.
	24 Feb 8:30	Assignment #3 Due – Conflict Assignment Due (Group Project)	
16	24 Feb 8:30 – 10:00	Project Scheduling Gantt Charts Program Evaluation and Preview Techniques (PERT) Critical Path Method (CPM) Constructing Network Diagrams Determining Critical Path and Slack Computer Scheduling Software The Importance of Milestones	Practice sheets for logic diagrams and Critical Path Calculations for Free Float and Total Float  - "CPM Scheduling and Its Use In Today's Construction Industry"
17	24 Feb 10:15 – 11:00	Case Study "Critical Path Method" in-class project	
18	24 Feb 11:00 – 12:00	Project Cost Management Estimating Estimating Tools Classes of Estimate Accuracy of Estimates at each Phase Budgeting Life Cycle Costing	
	24 Feb 12:00 – 4:30	Lunch and Group Work period	Research time and group work period for the major group project.
	25 Feb 8:30	Individual Research Paper Topics Should be Determined – not required and nothing to hand in	
19	25 Feb	Project Implementation	- U of R Tendering Policy

	08:30 – 10:00	Project Management Relationships Project Fast Tracking and Hyper Tracking Types of Construction Contracts Procurement Management Tendering Policies Advertising Proposals Bid Opening Contract Award	- Architectural Services Delivery Options  - "Project Contracts – A Decision Matrix Approach"  - "Hyper-track - It's Faster Than Anything You've Seen Before"  - "A Matrix for Project Delivery"  - "Design-Build: Is It For You?"  - "Mediation: Make buildings, Not War"
20	25 Feb 10:15 – 11:15	Risk Management Risk Identification Risk Control/Mitigation Risk Avoidance/Reduction Risk Deflection Bonding/Insurance Contingency Planning	- "Risk Assessment Groups: Key Component of Project Offices - "PMI, Project and Program RISK MANAGEMENT - A Guide to Managing Project Risks and Opportunities, Appendix A"
21	25 Feb 11:15- 12:00	Project Termination Commissioning User Acceptance Project Hand-over Quality Management Warranties and Guaranties	- "Uh-Oh. It's a Computer Systems Project"  - "A '30-60-90 Day' Approach to Planning IT Projects"
	25 Feb 12:00 – 4:30	Lunch and Group Work period	Research time and group work period for the major group project.
<b>©</b>	Three weeks later	FINAL PRESENTATIONS  A date approximately three weeks after 25 Sep will be selected (through class consensus) to do the final group presentations.  Depending on the size of the class and number of groups, approximately 3 hours will be required. An evening, weekend or workday period will be chosen depending on the availability and preference of the class.	* Individual Research Papers also due on the day of the presentations.