GBUS 865 and MBA 865
PROJECT MANAGEMENT

Instructor: Dave Button, MSc., PEng., PMP
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Schedule: 8:30 a.m. 4:30 p.m., Monday 18 February to Friday 22 February 2019

Final Group Presentation two weeks later 13:00 Sunday 10 March 2019
To accommodate those travelling we will also enable remote presentation
The class may also agree to do the presentation on Friday 10 March.

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

Location: Education Building, Room tbc


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.
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 non-executed 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-organization 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

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Mark</th>
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<tbody>
<tr>
<td>Assignment 2</td>
<td>10%</td>
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<td>Assignment 3</td>
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<td>Presentation</td>
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SUMMARY OF OVERALL COURSE EVALUATION

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<tr>
<th>Evaluation</th>
<th>Mark</th>
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<tr>
<td>Class participation</td>
<td>10%</td>
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<tr>
<td>Research Paper</td>
<td>40%</td>
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<tr>
<td>Course Project (Assignments 2,3,4)</td>
<td>50%</td>
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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 Manager 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

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<thead>
<tr>
<th>Montreal's Olympic Stadium</th>
<th>Expo 86 (Vancouver)</th>
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<tr>
<td>Grey Cup ’95 or ’03 or ’13</td>
<td>Scott Tournament of Hearts ’98</td>
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<td>Canada’s Museum of Civilization</td>
<td>Wascana Lake Deepening</td>
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<td>Avro Arrow</td>
<td>Montreal or Calgary Olympics</td>
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<td>Summer Games Bid or Preparations</td>
<td>Confederation Bridge</td>
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<td>Titanic</td>
<td>Introduction of GST</td>
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<td>Saskatchewan Centre of the Arts</td>
<td>Upgrader / Tar Sands Projects</td>
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<td>Three Gorges Dam China</td>
<td>Hospital Amalgamation</td>
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<td>Chunnel Project</td>
<td>Company Reorganization</td>
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<td>Computer Installation Project</td>
<td>Introduction of a new product</td>
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Any major initiative that meets the definition of a project.

RESEARCH PAPER MARKING

<table>
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<tr>
<th>Content and argument</th>
<th>80%</th>
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<td>Presentation (grammar etc.)</td>
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<td>20 Feb</td>
<td>11:00 – 12:00</td>
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| 12 | 20 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 | 20 Feb 2:45 – 4:00 | The Wedding Planner. In class Case Study, WBS for a Wedding |
| 13 | 20 Feb 4:00 – 4:30 | Group Work –  
This time should be used to continue work on the group project and group assignments. |
| 16 | 21 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 | 21 Feb 10:15 – 11:00 | Case Study “Critical Path Method” in-class project |
| 18 | 21 Feb 11:00 – 12:00 | Project Cost Management  
Estimating  
Estimating Tools  
Classes of Estimate  
Accuracy of Estimates at each Phase  
Budgeting  
Life Cycle Costing |
| 21 Feb 12:00 – 4:30 | Lunch and Group Work period  
Research time and group work period for the major group project. |
<p>| 22 Feb 8:30 | Individual Research Paper Topics Should be Determined and finalized nothing is required to be handed in at this time, but a topic should be well established. |</p>
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<th>Date</th>
<th>Time</th>
<th>Topics</th>
<th>Notes</th>
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| 19 | 22 Feb   | 08:30 – 10:00| Project Implementation  
Project Management Relationships  
Project Fast Tracking and Hyper Tracking  
Types of Construction Contracts  
Procurement Management  
 Tendering Policies  
 Advertising  
 Proposals  
 Bid Opening  
 Contract Award | - U of R Tendering Policy  
 - 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 | 22 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 | 22 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” |
|   | 22 Feb   | 12:00 – 4:30 | Lunch and Group Work period  
 This period may also be used for the final presentation…. Class will decide | Research time and group work period for the major group project. |
| ☀️ | 13:00    | Sunday 10 March | **FINAL PRESENTATIONS**  
 Unless agreed by the group otherwise, the time will be 13:00-17:00 Sunday 10 March. The alternate, with a decision to be made by the class is the last day of class on 22 February. If presentations are scheduled on 10 March, arrangements will be made for those not from Regina to present remotely. | * Individual Research Papers will be due on a date determined by the class approximately three weeks later. |