RYERSON UNIVERSITY

**Ted Rogers School of Information Technology Management
And G. Raymond Chang School of Continuing Education**

(C)ITM 410 – Business Process Design

COURSE OUTLINE FOR 2019-2020

1.0 PREREQUISITE

ITM 100 or ITM 102 or in the 2-Year Business Technology Management Ontario College Diploma Graduate Program. Students who do not have the prerequisite will be dropped from the course.

2.0 INSTRUCTOR INFORMATION

- Name:

- Office Phone Number:

- E-mail address:

- Faculty/course web site(s): https://my.ryerson.ca

- Office Location & Consultation hours:

  - Your instructor is available for personal consultation during scheduled consultation hours which are posted on their office door or on the course shell in D2L Brightspace. However, you are advised to make an appointment by e-mail or by telephone before coming to ensure that the professor is not unavoidably absent.

- E-mail Usage & Limits:

In accordance with the policy on Ryerson Student E-mail accounts (Policy 157), ***Ryerson requires that any official or formal electronic communications from students be sent from their official Ryerson E-mail account.*** As such emails from other addresses may not be responded to. Students are expected to monitor and retrieve messages and information issued to them by the University via Ryerson online systems on a frequent and consistent basis.

3.0 CALENDAR COURSE DESCRIPTION

This course introduces the principles of business process design for performance improvement. A systematic approach is used to teach students how to develop the design requirements for new business process architectures. Emphasis is placed on how to evaluate business process problems, analyze and design business processes to ensure organizational efficiency and effectiveness when

new technologies are implemented. Opportunities for process improvement are based on the business strategy, the value proposition, improvement objectives of the organization, and the implementation of of-the-shelf software systems (eg. ERP, CRM, SRM). This course is intended to develop students' understanding of, and competence in the use of appropriate methods, tools and techniques of process analysis and design for organizational improvement. To ensure the development of the necessary competencies, students will work on a case study and use state-of-the-art business process frameworks, analysis and design methodologies and appropriate software tools to analyze, simulate and design the business process solutions.

4.0 COURSE OBJECTIVES AND LEARNING OUTCOMES

The pedagogical approach for this course is Outcomes Based Action Learning. The processes of a case company or the actual small businesses are analyzed and improved by the teams of students working on their case projects. The material discussed in lectures provides context for that analysis. This course utilizes appropriate business process modeling methods and techniques that are commonly used during the review of business process integrity, efficiency, effectiveness or the financial analysis of the company's performance.

The learning objectives for students enrolled in this course are: (1) Building a detailed knowledge about the business process architecture and its role in the value chain; (2) Creating design competence for analyzing and re-engineering business processes; (3) Reinforcing business process specifications for the implementation or outsourcing of business processes; (4) Developing skills for writing business case reports for business process design and re-engineering initiatives.

Learning Outcomes:
Upon completion of the course, it is expected that you will be able to:
1. Define the value chain business process architecture for any type of enterprise
2. Understand and apply methodologies and tools used to design and improve business process and integrate technology, such as data flow diagrams, flowcharting control matrix
    a. identify business process improvement opportunities and/or problems,
    b. design new business processes to realize specific strategic goals,
    c. evaluate workflow and business process improvements,
    d. evaluate alternative approaches for realizing value chain activities
3. Identify issues related to organizational change processes needed for successful business process re-engineering and systems implementation
4. Develop a business case report for business process implementation, management or outsourcing.

There is heavy emphasis in the course on class participation and team work.

5.0 TEXTS & OTHER READING MATERIALS

Title: Operations Management: Processes and Supply Chains, (12th Edition)
Author: Lee J. Krajewski, Larry P. Ritzman, Manoj K. Malhotra

Publisher: Pearson
ISBN: 978-0134855424

Title: Business Process Design (Custom Book: Accounting Information Systems, 11th Edition)
Author: Ulric J. Gelinas, Richard B. Dull, Patrick Wheeler
Publisher: South-Western College
ISBN: 978-0176784539

6.0 TEACHING METHODS

You will already know how to develop requirements for business information needs and to design information systems from ITM305. This course will help you develop these skills further by guiding you in translating strategic requirements for organizational change into specific business process designs to implement strategic goals of the firm. This focuses on developing an in-depth understanding of how an organization's business process architecture supports its value chain activities (such as acquiring raw materials, processing them into goods and services, warehousing these, selling and delivering them to customers and updating the accounting records for the business transactions). The pedagogical approach for this course is Outcomes Based Action Learning. The reason for this is that it is impossible to develop design competence without structured experiential design learning activities. In this regard you will receive formal lectures on methods and techniques for business process design (analysis and modelling) and a set of In-Class Design Exercises. Process design and modeling methods will include process mapping, business rules, and cost benefit analysis. For the term project you will be required to develop and deliver a final professionally written business case report. The design assignments and term project will give you hands-on experience and help you to develop relevant practical knowledge in doing business process design in organizational settings. There will be no instruction in the use of software tools. All students are expected to know MS Excel and Word. Students will be required to conduct cost benefit analysis in Excel.

7.0 EVALUATION, ASSESSMENT AND FEEDBACK

The grade for this course is composed of the mark received for each of the following components:

Evaluation Component	Percentage of the Final Grade
Exam 1	30%
Exam 2	40%
Business Case Report	30%
Total	**100%**

NOTE: Students must achieve a course grade of at least 50% to pass this course.

❖ At least **20%** of student's grade based on individual work will be returned to students <u>prior</u> to the last date to drop a course in <u>good academic standing</u>.

Citation Format for Essays and Term Papers
All essay assignments, term paper and other written works must adhere with APA citation format. Technical errors (spelling, punctuation, proofing, grammar, format, and citations) and/or inappropriate levels of language or composition will result in marks being deducted. You are encouraged to obtain assistance from the Writing Centre (www.ryerson.ca/writingcentre) for help with your written communications as needed.

You can find APA guidelines and academic referencing from the following online resources:

Student Learning Support > Online Resources > Writing Support Resources
- APA Basic Style Guide

Ryerson Library Citations and Style Guides
- APA Style

8.0 TOPICS – SEQUENCE & SCHEDULE

Session	Topic	Learning Outcomes	Reading(s)	Activities & Due Dates
1	**Lecture:** The business enterprise as a System; Overview of Business Process Design, Competitive priorities. **In-Class Design Exercise:** Calculation of productivity ratios	The student should be able to identify process Inputs/ Outputs and calculate the impact of productivity on the profitability.	**[1] Chapter 1**	**Team Selection Due**
2	**Lecture:** Understanding the process architecture and execution, Process classification, Cross-functional processes. **In-Class Design Exercises: Break-Even Analysis,** Identifying the internal and external company elements;	The student should be able to describe businesses as systems, define the types of processes and identify the functional areas; link functional areas to core process.	**[1] Chapter 2 including Supplement A**	
3	**Lecture:** Modeling Business Processes – Part 1 (defining the scope for the process design).	The student should be able to develop Strategic Objectives and	**[2] Chapter 4**	

	In-Class Design Exercise: Defining the Infrastructure and Process Steps for a case Company (creating Context, Physical & Logical Diagrams)	Data Flow Diagrams		
4	**Lecture:** Modeling Business Processes – Part 2 (Developing Flowcharts) **In-Class Design Exercise:** Developing Workflow Model of a Case Company (creating Flowchart)	The student should know how to flowchart workflow process models	**[1] Chapter 2** **[2] Chapter 4**	
5	**Lecture:** Customer Order Fulfillment Business process (Order to Cash) **In-Class Design Exercise:** Selecting process goals, identifying process deficiencies and defining control plans for Sales and Billing Processes.	The student should know the processing steps, data and documents required for the generic Order Entry/Sales/Billing processes	**[2] Chapters 10, 11**	
6	**Exam 1**			**Results will be released in week 7**
7	**Lecture:** Requisition Business Process (Purchase to Pay) **In-Class Design Exercise:** Selecting process goals, identifying process deficiencies and defining control plans for Purchasing and Payment Processes.	The student should know the processing steps, data and documents required for the generic Purchasing/Cash Disbursement processes	**[2] Chapters 12, 13**	**Business Case Report – Part I due (***Documenting "As-Is" process*
8	**Lecture:** Integrated Production Processes, **In-Class Design Exercise:** Analyzing internal control structure using a Control Matrix, Economic Feasibility Analysis	The student should know the steps and planning engines used for material management and how to conduct Risk Analysis, cost/benefit	**[2] Chapter 15 Selected readings on Financial Analysis**	

	In-Class Design Exercise: Financial Analysis of design options	analysis for business process design		
9	**Lecture**: Cycle Time and Capacity Analysis **In-Class Design Exercise:** Calculating Cycle Times	The student should know how to conduct Cycle Time and Capacity Analysis	**[1] Chapter 4**	
10	**Exam 2**			
11	**Lecture:** Supply Chain Design and Capacity Constraints Analysis **In-Class Design Exercise:** Identifying capacity constraints	The student should know how to analyze bottlenecks and identify issues with material flow	**[1] Chapter 5**	**Final Review of Case project**
12	**Presentations and critical reflection**			**Case Report Parts II/III due** (*Evaluation of the existing design/ developing "To-Be" model*)

9.0 VARIATIONS WITHIN A COURSE
All sections of a course (Day and CE sections) will follow the same course outline and will use the same course delivery methods, methods of evaluation, and grading schemes. Any deviations will be posted on D2L Brightspace once approved by the course coordinator.

10.0   OTHER COURSE, DEPARTMENTAL, AND UNIVERSITY POLICIES
For more information regarding course management and departmental policies, please consult the '**Appendix of the Course Outline**' which is posted on the Ted Rogers School of Information Technology Management website.

NOTE: Students must adhere to all relevant university policies found in their online course shell in D2L and /or on the following URL: senate-course-outline-policies.

The appendix covers the following topics:

1. Attendance & Class Participation

2. Email Account

3. Request for Academic Consideration

4. Examinations & Tests

5. Late Assignments

6. Standard of Written Work

7. Academic Grading Policy

8. Academic Integrity

9. Student Rights