

# 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 2020-2021

#### 1.0 PREREQUISITE(S)

[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 virtual consultation during scheduled consultation hours. Information on the consultation format is provided in the D2L course shell. If you wish to make an appointment, kindly do so via email to ensure the professor is available.
- E-mail Usage & Limits:

Students are expected to monitor and retrieve messages and information sent through D2L and Ryerson email on a frequent and consistent basis. In accordance with the policy on Ryerson student email accounts ([Policy 157](#)), Ryerson requires that any electronic communication by students to Ryerson faculty or staff be sent from their official Ryerson email account. Messages from other accounts may be disregarded.

#### 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**

Learning outcomes describe what students are expected to have learned or achieved; as a result, they usually describe what students will be capable of doing, or what evidence will be provided to substantiate learning.

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, (12<sup>th</sup> 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. Gelineas, Richard B. Dull, Patrick Wheeler

**Publisher:** South-Western College

**ISBN:** 978-0176784539

## 6.0 TEACHING METHODS

In Fall 2020 this course will be taught will be taught remotely in virtual classrooms. Instruction will take place at scheduled hours, following the approach outlined in D2L Brightspace. You will not be required to attend the Ryerson University campus to complete this course.

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%
<b>Total</b>	<b>100%</b>

**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 prior to the last date to drop a course in [good academic standing](#).

### **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](http://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 PLAGIARISM DETECTION**

*(Please delete the following two (2) points if NOT relevant for your course)*

**Turnitin** (if used in this course)

Turnitin.com is a plagiarism prevention and detection service to which Ryerson subscribes. It is a tool to assist instructors in determining the similarity between students' work and the work of other students who have submitted papers to the site (at any university), internet sources, and a wide range of books, journals and other publications. While it does not contain all possible sources, it gives instructors some assurance that students' work is their own. No decisions are made by the service; it generates an "originality report," which instructors must evaluate to judge if something is plagiarized.

Students agree by taking this course that their written work will be subject to submission for textual similarity review to Turnitin.com. Instructors can opt to have student's papers included in the Turnitin.com database or not. Use of the Turnitin.com service is subject to the terms-of-use agreement posted on the Turnitin.com website. Students who do not want their work submitted to this plagiarism detection service must, by the end of the second week of class, consult with their instructor to make alternate arrangements.

Even when an instructor has not indicated that a plagiarism detection service will be used, or when a student has opted out of the plagiarism detection service, if the instructor has reason to suspect that an individual piece of work has been plagiarized, the instructor is permitted to submit that work in a non-identifying way to any plagiarism detection service.

### Virtual Proctoring (if used in this course)

Online exam(s) within this course use a virtual proctoring system. Please note that your completion of the exam will be recorded via the virtual platform and subsequently reviewed by your instructor. The virtual proctoring system provides the instructor with a recording that only includes video where possible indications of suspicious behaviour are identified. Recordings will be held for a limited period of time in order to ensure academic integrity is maintained.

Access to a computer that can support remote recording is your responsibility as a student. The computer should have the latest operating system, at a minimum Windows (10, 8, 7) or Mac (OS X 10.10 or higher) and web browser Google Chrome or Mozilla Firefox. You will need to ensure that you can complete the exam using a reliable computer with a webcam and microphone available, as well as a high-speed internet connection. Please note that you will be required to show your Ryerson OneCard prior to beginning to write the exam. In cases where you do not have a Ryerson OneCard, government issued ID is permitted.

Information will be provided prior to the exam date by your instructor who may provide an opportunity to test your set-up or provide additional information about online proctoring. Since videos of you and your environment will be recorded while writing the exam, please consider preparing the background (room / walls) so that personal details are not visible, or move to a room that you are comfortable showing on camera.

## 9.0 TOPICS – SEQUENCE & SCHEDULE

Session	Topic	Learning Outcomes	Reading(s)	Activities & Due Dates
1	<b>Lecture:</b> The business enterprise as a System; Overview of Business Process Design, Competitive priorities. <b>In-Class Design Exercise:</b> 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	<b>Lecture:</b> Understanding the process architecture and execution, Process classification, Cross-functional processes. <b>In-Class Design Exercises:</b> 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	<p><b>Lecture:</b> Modeling Business Processes – Part 1 (defining the scope for the process design).</p> <p><b>In-Class Design Exercise:</b> Defining the Infrastructure and Process Steps for a case Company (creating Context, Physical &amp; Logical Diagrams)</p>	The student should be able to develop Strategic Objectives and Data Flow Diagrams	<b>[2] Chapter 4</b>	
4	<p><b>Lecture:</b> Modeling Business Processes – Part 2 (Developing Flowcharts)</p> <p><b>In-Class Design Exercise:</b> Developing Workflow Model of a Case Company (creating Flowchart)</p>	The student should know how to flowchart workflow process models	<b>[1] Chapter 2</b> <b>[2] Chapter 4</b>	
5	<p><b>Lecture:</b> Customer Order Fulfillment Business process (Order to Cash)</p> <p><b>In-Class Design Exercise:</b> Selecting process goals, identifying process deficiencies and defining control plans for Sales and Billing Processes.</p>	The student should know the processing steps, data and documents required for the generic Order Entry/Sales/Billing processes	<b>[2] Chapters 10, 11</b>	
6	<b>Exam 1</b>			<b>Results will be released in week 7</b>
7	<p><b>Lecture:</b> Requisition Business Process (Purchase to Pay)</p> <p><b>In-Class Design Exercise:</b> Selecting process goals, identifying process deficiencies and defining control plans for Purchasing and Payment Processes.</p>	The student should know the processing steps, data and documents required for the generic Purchasing/Cash Disbursement processes	<b>[2] Chapters 12, 13</b>	<b>Business Case Report – Part I due</b> <i>(Documenting “As-Is” process)</i>
8	<p><b>Lecture:</b> Integrated Production Processes,</p> <p><b>In-Class Design Exercise:</b> Analyzing internal control structure using a Control</p>	The student should know the steps and planning engines used for material	<b>[2] Chapter 15</b> <b>Selected readings on Financial Analysis</b>	

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

## 10.0 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.

## 11.0 OTHER COURSE, DEPARTMENTAL, AND UNIVERSITY POLICIES

For more information regarding course management and departmental policies, please consult the [Course Outline Appendix](#) 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:

Attendance & Class Participation

Email Account  
Request for Academic Consideration  
Examinations & Tests  
Late Assignments  
Standard of Written Work  
Academic Grading Policy  
Academic Integrity  
Student Rights

### Important Resources Available at Ryerson

- [Academic Accommodation Support](#): Ryerson University acknowledges that students have diverse learning styles and a variety of academic needs. If you have a diagnosed disability that impacts your academic experience, connect with Academic Accommodation Support (AAS). Visit the [AAS website](#) or contact [asadmin@ryerson.ca](mailto:asadmin@ryerson.ca) for more information. Note: All communication with AAS is voluntary and confidential, and will not appear on your transcript.
- [The Library](#) provides research workshops and individual assistance. If the University is open, there is a Research Help desk on the second floor of the library, or go to [Workshops](#).
- [Student Learning Support](#) offers group-based and individual help with writing, math, study skills, and transition support, as well as [resources and checklists to support students as online learners](#).
- You can submit an [Academic Consideration Request](#) when an extenuating circumstance has occurred that has significantly impacted your ability to fulfill an academic requirement.
- [Ryerson COVID-19 Information and Updates for Students](#) summarizes the variety of resources available to students during the pandemic.
- Familiarize yourself with the tools you will need to use for remote learning. The [Continuity of Learning Guide](#) for students includes guides to completing quizzes or exams in D2L or Respondus, using D2L Brightspace, joining online meetings or lectures, and collaborating with the Google Suite.