

RYERSON UNIVERSITY

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

COURSE OF STUDY 2017-2018

(C)ITM 330 – Supply Chain Process Architecture

1.0 PREREQUISITE

The prerequisite for this course is ITM 305 or Direct Entry. 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:

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. ***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.

3.0 CALENDAR COURSE DESCRIPTION

This course deals with enterprise wide integrated systems, and process thinking as a key element in business restructuring. Many key business applications are now implemented using comprehensive and complex enterprise software. The concepts, structure, benefits and problems of enterprise solutions are examined from a business perspective as well as from a technical Information Technology perspective.

4.0 COURSE OVERVIEW

This course introduces (i) various concepts, principles, and strategies in the design, planning, and operation of supply chains; (ii) enterprise resource planning (ERP) systems and their key role in sharing and integrating information across functional areas of the firm; and (iii) how the effective use of ERP software can improve the performance of the business processes that make up the business enterprise. ERPs are typically purchased as customizable software packages that run in client-server environments. Increasingly, the client software is web-based. ERPs vary widely in size and sophistication from packages for medium-sized companies such as Great Plains (now Microsoft Dynamics GP) to large complex packages from vendors such as SAP or Oracle.

Many companies view supply chain management as the core of their business strategy which is the company's plan for being competitive. A supply chain consists of all parties involved, directly or indirectly, in fulfilling a customer request which could entail delivering a product or service. The supply chain includes not only the manufacturer and suppliers, but also transporters, warehouses, retailers, and even customers. Within each organization, such as a manufacturer, the supply chain includes all functions involved in receiving and filling a customer request. These functions include, but are not limited to, new product development, marketing, operations, distribution, finance, and customer service.

Also recently, managers have been thinking in terms of business processes rather than business functions. This helps them to look at their organization from the customer's perspective. In that regard, a supply chain is also an integrated group of business processes and activities with the same goal – providing customer satisfaction. These processes include the *procurement* of services, materials, and components from suppliers; *production* of the products and services; and *distribution* of products to the customer including taking and filling orders. Information and information technology tie these processes together; it is what *integrates* them into a supply chain.

The course will introduce the basic concepts in supply chain management; focus on the need for integration of information within an organization, and the critical role of ERP software in providing such integration. Since ERP software has evolved from inventory-tracking systems and material requirements planning systems, inventory management and resource planning are specifically discussed within the supply chain context. However, since a supply chain does not consist of a single organization, but includes suppliers, transporters, and retailers as well, issues of integration, information sharing and strategic alliances among these parties are introduced. Throughout the course, constant emphasis will be on building the skills in analyzing and improving business processes in general.

5.0 COURSE OBJECTIVES

Upon completion of the course, students will be able to:

- describe basic functional areas of a business and how they are related;
- understand and appreciate the business process perspective;
- understand the need for integrated enterprise systems;
- describe ERP business processes and functionality;
- be familiar with main concepts and issues in designing, planning, and operating supply chains
- identify process improvement opportunities; make recommendations for continuous improvement

6.0 EVALUATION

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

Evaluation Component	Percentage of the Final Grade
Assignments	10%
Mid-term Exam	30%
Final Exam	60%
Total	100%

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

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:

a) Ryerson Writing Support Web site:

<http://www.ryerson.ca/content/dam/studentlearningsupport/resources/citation-conventions/APA%20Basic%20Style%20Guide.pdf>

b) Ryerson Library for APA style guide: <https://library.ryerson.ca/guides/style/>

7.0 POSTING OF GRADES

- ❖ All grades, on assignments or tests must be posted or made available to students through the return of their work. Grades on final exams must be posted. However, as there may be other consideration in the determination of final grades, students will receive their official final grade in the course only from the Registrar. Final official course grades may not be posted or disclosed anywhere by an instructor.
- ❖ Posting of grades on the Course Management System (D2L Brightspace) is preferred. If grades are posted in hard copy they must be posted numerically sorted by student identification number after at least the **first four digits** have been removed. Instructors must inform students in all course management documentation of the method to be used in the posting of grades. Students who wish not to have their grades posted must inform the instructor in writing.
- ❖ Some graded work will be returned to students prior to the last date to drop a course without academic penalty.

8.0 TOPICS – SEQUENCE & SCHEDULE

Session	Topic & Learning Outcomes	Readings	Assignments
1	Business Functions and Business Processes <ol style="list-style-type: none"> 1. Describe the main functional areas of business operations 2. Contrast Business functions and Business Processes 3. Identify the types of input and output data needed and produced by functional areas 4. Explain the importance of integrated information systems in business 	Chapter 1	
2	The Development of Enterprise Resource Planning Systems <ol style="list-style-type: none"> 1. Describe the modular characteristics of ERP systems 2. Explain the advantages and drawbacks of ERP systems 	Chapter 2	
3	Marketing Information Systems and the Sales Order Process <ol style="list-style-type: none"> 1. Explain the standard business processes for a sales order 2. Explain sales and distributions using an ERP system 3. Explain how integrated data sharing using ERP systems increases efficiency of business operations 	Chapter 3	
4	Production and Supply Chain Management Information Systems <ol style="list-style-type: none"> 1. Explain the production planning process 2. Describe the material management process in manufacturing production 3. Explain how structured processes for supply chain management planning affects efficiency and decision making 	Chapter 4	Assignment 1
5			
6	Measuring Supply Chain Performance; Drivers and Metrics, Key Performance Indicators (KPI) <ol style="list-style-type: none"> 1. Explain what are the widely used supply chain management (SCM) performance measures 2. Explain the best practices for process measurement and the KPI for SCM 	SCM - Performance Measures – Tutorial Point	Assignment 2

7	<p>Supply Chain Integration and Coordination; Risk Pooling; The Bullwhip Effect; Relationships and Partnering; Contracts</p> <ol style="list-style-type: none"> 1. Explain how SCM integrate business processes and add value to customers and other stakeholders 2. Explain how coordination, collaboration and integration among suppliers is necessary to achieve effective SCM 	<p>Coordination, Collaboration and Integration for Supply Chain Management By H. S. Moharana et. al</p>	
8	<p>Accounting in ERP Systems</p> <ol style="list-style-type: none"> 1. Explain the problems associated with accounting and financial reporting using unintegrated information systems 2. Describe how regulations such as the Sarbanes-Oxley act has affected accounting information systems 3. Explain how the use of ERPs lead to management and accounting-reporting benefits 	Chapter 5	Assignment 3
9	Midterm		
10	<p>Human Resources Processes with ERP</p> <ol style="list-style-type: none"> 1. Explain the critical important of the human resource function to business success 2. Describe the key processes management by the human resource department 3. Explain human resource processes can be more effectively managed using integrated information systems 	Chapter 6	
11	<p>Process Modeling, Process Improvement, and ERP Implementation; Lean Systems</p> <ol style="list-style-type: none"> 1. Develop basic models of business processes using flowcharts 2. Analyze business process models and provide alternatives for process improvements 3. Describe the key elements/tools underlying the management ERP implementations 	Chapter 7	Assignment 4

12	ERP and Electronic Commerce <ol style="list-style-type: none"> 1. Describe the elements underlying the software infrastructure underlying E-Commerce and ERP systems 2. Explain how ERP can be instrumental in a company's successfully running its E-Commerce operations 	Chapter 8	
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9.0 TEACHING METHODS

This course will incorporate formal lectures including in-class exercises/activities, and a set of homework assignments. The students are expected to have studied the assigned readings prior to attending the classes.

10.0 TEXTS & OTHER READING MATERIALS

Title: Concepts in Enterprise Resource Planning (4th Edition)

Author: Bret Wagner & Ellen Monk

Publisher: Course Technology

ISBN: 978-1111820398

Additional readings will be posted on Blackboard.

11.0 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.

12.0 OTHER COURSE, DEPARTMENTAL, AND UNIVERSITY POLICIES

- For more information regarding course management and departmental policies, please consult the '**Appendix of the Course of Study**' which is posted on the Ted Rogers School of Information Technology Management website, <http://www.ryerson.ca/content/dam/itm/documents/cos/Appendix.pdf>. This appendix covers the following topics:
 - 12..1 Attendance & Class Participation
 - 12..2 Email Usage
 - 12..3 Request for Academic Consideration
 - 12..3.1 Ryerson Health Certificate
 - 12..3.2 Academic Accommodation for Students with Disabilities
 - 12..3.3 Religious, Aboriginal or Spiritual Observance
 - 12..3.4 Re-grading and Recalculation
 - 12..4 Examinations & Tests
 - 12..4.1 Period of Prohibition from Testing
 - 12..4.2 Make-Up of Mid-Term Tests, Assignments and Other Assessments During the Semester
 - 12..4.3 Make –Up of Final Exams
 - 12..4.4 Missing a Make-Up

- 12..5** Late Assignments
- 12..6** Standard of Written Work
- 12..7** Academic Grading Policy
- 12..8** Academic Integrity
 - 12..8.1** Turnitin.com
- 12..9** Student Rights