ITM 330 Supply Chain Process Architecture

COURSE OUTLINE FOR 2025-2026

Prerequisite(s): ITM 410 or ITM 415
Antirequisite(s): None

Faculty/Contract Lecturer Information

- **Faculty/Contract Lecturer Name:**
- **Office Location:**
- **Office Hours:**
- **Phone:** (416) 979 – 5000, ext.
- **Course Website:** my.torontomu.ca (for courses using D2L)
- **Email Address:** youremail@torontomu.ca

Email Policy

Students are expected to monitor and retrieve messages and information sent through D2L and TMU email on a frequent and consistent basis. In accordance with the Policy on TMU Student E-mail Accounts (Policy 157), Toronto Metropolitan University (TMU) requires that any electronic communication by students to TMU faculty or staff be sent from their official university email account. Communications sent from other accounts may be disregarded.

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.

Course Details

Teaching Methods

If you are registered in an in-person or a virtual classroom, instruction will take place at scheduled hours, following the approach outlined in D2L Brightspace. If you are registered in a Chang School Distance Education course, please follow the schedule, course outline and learning modules as outlined in D2L Brightspace.

Note: All assessments in this course, regardless of its delivery format, will be held in-person on campus. This applies to in-person, virtual, and online courses, including sections/courses delivered through the Chang School.

Course Materials

Title: Concepts in Enterprise Resource Planning (4th Edition)
Author: Bret Wagner & Ellen Monk
Publisher: Course Technology
ISBN: 978-1111820398
Purchase Link: https://www.cengage.ca/c/concepts-in-enterprise-resource-planning-4e-monk-wagner/9781111820398/
Price: eTextbook: $74.95 and Hardcopy ($116.95)

Lecture Notes provided via the course portal.

Learning Outcomes

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 design, implementation, and 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 and provisioned by cloud computing. 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 competitiveness plan. 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.

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Recently, managers have been thinking in terms of business processes rather than business functions. The process architecture lens allows managers to view 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 – fulfilling customer needs, providing customer satisfaction, and maintaining customer retention. 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 (i.e., 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.

Upon completion of the course, students will be able to:
- describe basic functional areas of a business and how they are related;
- comprehend the business process perspective;
- understand the need for integrated enterprise systems;
- describe Enterprise Resource Planning (ERP) business processes and functionality;
- explain main concepts and issues in designing, planning, and operating supply chains;
- identify process improvement opportunities; make recommendations for continuous improvement.

Academic Integrity

Academic integrity is integral to your learning, the credibility of your degree or certification, and the integrity of the university as a whole. Senate Policy 60: Academic Integrity defines academic misconduct, provides a non-exhaustive list of examples of behaviours that may be considered as academic misconduct, and explains how academic misconduct concerns are evaluated and decided. The entirety of the policy applies in this course. As well, please note that submitting work created in whole or in part by artificial intelligence tools unless expressly permitted by the faculty/contract lecturer, is considered a violation of Policy 60.

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Generative AI Course Policy, Plagiarism Detection, and Virtual Proctoring

Generative AI Course Policy

Use of Generative AI (e.g. ChatGPT, Grammarly, Perplexity, DeepL Translator) to develop or assist with any ideas or material submitted for coursework is expressly prohibited in this course. Use of Generative AI in this manner will be considered a breach of Policy 60.

Turnitin or another originality detection software

Turnitin is a plagiarism prevention and detection service to which TMU subscribes. It is a tool to assist faculty/contract lecturers 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 faculty/contract lecturers some assurance that students' work is their own. No decisions are made by the service; it generates an "originality report," which faculty/contract lecturers 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. Instructors can opt to have student's papers included in the Turnitin database or not. Use of the Turnitin service is subject to the terms-of-use agreement posted on the Turnitin 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 faculty/contract lecturer to make alternate arrangements. Students who choose not to have their papers screened for textual similarity review by turnitin may be required to submit additional work with their research essay. For example:

- an annotated bibliography of each source used in your paper; and/or
- the first few pages of each cited source used in your paper

Even when an faculty/contract lecturer 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 faculty/contract lecturer has reason to suspect that an individual piece of work has been plagiarized, the faculty/contract lecturer is permitted to submit that work in a non-identifying way to any plagiarism detection service.

Copyright

The course materials provided to you are copyrighted, and may not be shared without my express written permission. Do not share these materials (e.g. course outline, lecture slides, assignment instructions) with others and do not post them on the internet during the course, or at any time after. If you do so, Policy 60 will apply.

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Academic Integrity Resources

To learn more about Policy 60 and how to avoid academic misconduct, please review and take advantage of these resources:

- Policy 60: Academic Integrity: www.torontomu.ca/senate/policies/academic-integrity-policy-60/
- Academic Integrity Office website: www.torontomu.ca/academicintegrity
- "Academic Integrity in Space" game: https://games.de.torontomu.ca/aio/#/
- "Academic Integrity in Cyberspace!" game: https://www.torontomu.ca/aic/#/
- Student Life and Learning Support: www.torontomu.ca/student-life-and-learning/learning-support

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Topics and Course Schedule

Class#	Topic & Learning Outcomes	Readings	Assignments
01	**Business Functions and Business Processes** 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	
02	**The Development of Enterprise Resource Planning Systems** 1. Describe the modular characteristics of ERP systems 2. Explain the advantages and drawbacks of ERP systems	Chapter 2	Assignment 1
03	**Marketing Information Systems and the Sales Order Process** 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	
04	**Supply Chain Management-1** 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	Lecture Notes	Assignment 2

05	**Supply Chain Management-2**
	  1. Analyse supply chain management in international trade
	  2. Information pipelines in Supply Chain Management
	  3. Design Principles for Supply Chain Management Information Systems
		Reading: Avocados Crossing Borders
		
		Lecture Notes	

05			
06	**Midterm (in-class)**		

07	**Process Modeling-1:** Process Improvement, and ERP Implementation; Lean Systems
	
	  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
		
		Lecture Notes	

08	**Process Modeling-2:** Process Improvement, and ERP Implementation; Lean Systems
	
	  4. Develop basic models of business processes using flowcharts
	  5. Analyze business process models and provide alternatives for process improvements
	Describe the key elements/tools underlying the management ERP implementations
		Chapter 7
		
		Lecture Notes
			Assignment 3

09	**Supply Chain Integration and Coordination**; Risk Pooling; The Bullwhip Effect; Relationships and Partnering; Contracts 1. Explain how SCM integrate business processes and add	Coordination, Collaboration and Integration for Supply Chain Management By H. S. Moharana et. al	

	value to customers and other stakeholders 2. Explain how coordination, collaboration and integration among suppliers is necessary to achieve effective SCM	[SCM - Performance Measures](#) – Tutorial Point Chapter 4	
10	**ERP Project Risk and Cost Management** 1. Understand and manage the various risks associated with ERP projects 2. Understand and manage the various costs associated with ERP projects	Lecture Notes	Assignment 4
11	Supply Chains and ERPs: Taking Stock and Looking Ahead	Lecture Notes	
12	**Final Exam: Post-Midterm Content (in-class)**		

Evaluation

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

Evaluation Component	Due Date	Percentage of Final Grade	Anticipated Return Date
Assignments	Weeks 2, 4, 8, & 10	40%	Week 3, 5, 9,11
Midterm Exam	Week 6	30%	Week 8
Midterm Exam-2	Week 12	30%	Week 14
Final Grade		100%	
Note: Students must achieve a course grade of at least 50% to pass this course. At least 20% of the grade based on individual work will be returned to students prior to the last date to drop a course in good academic standing. For Fall 2025, this is Friday November 14, 2025. For Winter 2026, this is Friday March 27, 2026.			

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University Policies

You are reminded that you are required to adhere to all relevant university policies found in their online course shell in D2L and/or on the Senate website. Please refer to the Course Outline Appendix for more detail.

Important Resources Available at Toronto Metropolitan University

- The University Libraries provide research workshops and individual consultation appointments. There is a drop-in Research Help desk on the second floor of the library, and students can use the Library's virtual research help service to speak with a librarian, or book an appointment to meet in person or online.
- Student Life and 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. You may always visit the Senate website and select the blue radio button on the top right hand side entitled: Academic Consideration Request (ACR) to submit this request.
  For Extenuating Circumstances, Policy 167: Academic Consideration allows for a once per semester ACR request without supporting documentation if the absence is less than 3 days in duration and is not for a final exam/final assessment. Absences more than 3 days in duration and those that involve a final exam/final assessment, always require documentation. Students must notify their faculty/contract lecturer once a request for academic consideration is submitted. See Senate Policy 167: Academic Consideration.
  Longer absences are not addressed through Policy 167 and should be discussed with your Chair/Director/Program to be advised on next steps.
- If taking a remote course, familiarize yourself with the tools you will need to use for remote learning. The Remote Learning Guide for students includes guides to completing quizzes or exams in D2L Brightspace, with or without Respondus LockDown Browser and Monitor, using D2L Brightspace, joining online meetings or lectures, and collaborating with the Google Suite.
- FAQs Academic Considerations and Appeals
- Information on Copyright for Faculty and students.
- Information on Academic Integrity for Faculty and students.

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Accessibility

- At Toronto Metropolitan University, we are committed to ensuring that all courses are accessible to everyone and to removing barriers that may prevent some individuals from enrolling in courses.
- All technologies and tools used in this course are accessible.
- Students who discover an accessibility barrier with any of the course materials or technologies should contact their faculty/contract lecturer.
- As outlined in Policy 159: Academic Accommodation of Students with Disabilities, students are required to proactively consult with AAS, the faculty/contract lecturer, Department or Faculty, as soon as feasible, including prior to enrolling in a course or program, on any concerns they may have about their ability to meet the essential academic requirements of a course/program.

Academic Accommodation Support

Academic Accommodation Support (AAS) is the university's disability services office. AAS works directly with incoming and returning students looking for help with their academic accommodations. AAS works with any student who requires academic accommodation regardless of program or course load.

- Learn more about Academic Accommodation Support.
- Learn how to register with AAS.
- Learn about Policy 159: Academic Accommodation of Students with Disabilities

Academic Accommodations (for students with disabilities) and Academic Consideration (for students faced with extenuating circumstances that can include short-term health issues) are governed by two different university policies. Learn more about Academic Accommodations versus Academic Consideration and how to access each.

Wellbeing Support

At Toronto Metropolitan University, we recognize that things can come up throughout the term that may interfere with a student's ability to succeed in their coursework. These circumstances are outside of one's control and can have a serious impact on physical and mental well-being. Seeking help can be a challenge, especially in those times of crisis.

If you are experiencing a mental health crisis, please call 911 and go to the nearest hospital emergency room. You can also access these outside resources at anytime:

- Distress Line: 24/7 line for if you are in crisis, feeling suicidal or in need of emotional support (phone: 416–408–4357)
- Good2Talk: 24/7-hour line for postsecondary students (phone: 1-866-925-5454)
- Keep.meSAFE: 24/7 access to confidential support through counsellors via My SSP app or 1-844-451-9700

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If non-crisis support is needed, you can access these campus resources:
- Centre for Student Development and Counselling: 416-979-5195 or email csdc@torontomu.ca
- Consent Comes First – Office of Sexual Violence Support and Education: 416-919-5000 ext 3596 or email osvse@torontomu.ca
- Medical Centre: call (416) 979-5070 to book an appointment

We encourage all Toronto Metropolitan University community members to access available resources to ensure support is reachable. You can find more resources available through the Toronto Metropolitan University's Wellbeing Central website.

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