

**CARLETON UNIVERSITY
SPROTT SCHOOL OF BUSINESS
BUSI 4331 / A
2019 / FALL
E-SUPPLY CHAIN TECHNOLOGY AND MANAGEMENT**

Instructor: Ahmed Doha

Office: Room 909, Dunton Tower

Office Hours: By appointment only on Thursdays between 4:30-5:30 pm. Email for appointment.

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Phone Number: (613) 520-2600 ext. 1909

TA: TBA

Course meets: Mondays 6:05 pm - 8:55 pm

Pre-requisites & precluded Courses: third-year standing and BUSI 2301 and BUSI 2400 with a grade of C or higher in each.

Course Calendar description from the 2019/2020 University calendar: The strategic and operational issues of supply chain management (SCM) driven by information and communication technologies (ICT). Internet-enabled technology to support the SCM processes both within the firm and across the supply chain in sourcing, producing and delivering.

Course Description: ICT is a core capability that is essential for supply chain integration. This course discusses the state of the art ICT that enables the integration of different operational functions such as sourcing, innovation, product development, manufacturing, and logistics across different entities within a firm or across different firms for effective and efficient management of the supply chain of goods and services. This course strikes a balance between the theoretical underpinnings of and hands-on experience on such technologies. The knowledge body in this course is useful for students of all business concentrations.

Learning objectives:

- Developing basic understanding of the foundations of e-SCM strategic and operational issues in the context of established and emerging technologies.
- Hands-on experience with SCM technologies.

READING(S)/TEXTBOOK(S)/REQUIRED MATERIALS

Reference Textbook

Textbook 1: David Frederick Ross, Introduction to Supply Chain Management Technologies, Second Edition, CRC Press, 2010. **ISBN-13:** 9781439837535.

Textbook 2: Kenneth C. Laudon and Carol Traver, E-Commerce 2015, Eleventh Edition, Prentice Hall, 2015. **ISBN-10:** 0133507165 • **ISBN-13:** 9780133507164

Articles

Academic journal and practitioner white paper articles as indicated in the course schedule.

Software Platforms

Software platforms, indicated in the schedule, will be used in a lab environment.

Class Presentation Slides

Presentation slides, where used, will be made available via cuLearn.

COURSE EVALUATION

Grade Distribution

Attendance & Participation	10%
Business Plan Presentation	10%
Business Plan Report	30%
Term Paper Presentation	10%
Term Paper	40%

Attendance & Participation (10%)

Attendance and participation is essential for the individual's and collective learning experience both in the classroom and the lab. This explains the relatively high weight of this activity in the grade distribution (10% of overall grade). You are expected to read the material before class and come prepared for engaged, informed, and well-reasoned discussions. Both the quantity and quality of your contributions will determine your class participation grade. Quality contributions go beyond merely stating the facts and repeating information from the readings to generating intellectually stimulating remarks and questions that help the classroom engage more with the course material.

Business Plan Report (30%) and Presentation (10%)

Based on the foundations established in the first four weeks, student groups will formulate an innovative e-Commerce business plans, which will later (in the term paper work) be fully built and implemented as an e-Commerce store using Shopify toolbox. Student groups will write a report detailing their business plans and will make presentations showcasing the highlights of their business plans. Rubrics will be provided on cuLearn. Submit your business model paper as a Microsoft Word document and presentation slides by email to the instructor's email address to ahmed.doha@carleton.ca. The deadline to submit the term paper and presentation slides is Oct 6th, 2019 at 11:59 pm. Late submissions will be deducted 20% of the mark for each day of delay.

Term Paper (40%) and Presentation (10%)

In the term paper work, student groups will further develop their business plans by integrating AI, IoT, and Chatbot capabilities to create value and add a strategically competitive edge. Student groups will write a term paper discussing the strategic and operational advantages as well as challenges of integrating AI, IoT, and Chatbot technologies in their business plans. In their term paper presentations, student groups will present their fully developed Shopify stores and term papers. Rubrics will be provided on cuLearn. Submit your term paper as a Microsoft Word document and presentation slides by email to the instructor's email address to ahmed.doha@carleton.ca. The deadline to submit the term paper and presentation slides is Dec 1st, 2019 at 11:59 pm. Late submissions will be deducted 20% of the mark for each day of delay. Students who do not obtain at least 50% on their term work prior to writing the term paper will not be allowed to write a term paper and will thus fail the course.

GENERAL GUIDELINES

Student Groups

- Instructor will form student groups in random during the first class.
- No changes in student groups are allowed.

Attendance

- Class and lab attendance are highly important and is part of the class participation grade.
- Attendance will be taken electronically using Poll Everywhere supported by Carleton's Educational Development Center. A connected device such as a smartphone, tablet, or laptop is required to register attendance. In order to get the full participation mark, a student needs to attend at least 10 classes (80% of all 12 classes) AND electronically answer the Poll Everywhere attendance question. Missing more than two classes is highly discouraged and will result in at least 50% reduction in the overall class participation grade.

Valid Excuses

- According to University policy, the only valid excuse for missing a deadline is for medical reasons or death in the family and must be documented with a medical certificate. Any other reason (such as travel, etc...) will not be considered. In such circumstances, separate arrangements will be made. If you miss a deadline for a reason that is not deemed as legitimate, your mark will be zero.

TENTATIVE SCHEDULE

Wk	Date	Topic	Course Material
1	9/9/2019	Class: <ul style="list-style-type: none">▪ Strategic supply chain▪ Supply chain technologies: An overview	<ul style="list-style-type: none">▪ Textbook 1: Chapter 1▪ Textbook 1: Chapter 9
2	16/9/2019	Class: <ul style="list-style-type: none">▪ e-Commerce Business Models	<ul style="list-style-type: none">▪ Textbook 2: (Chapter 2)

3	23/9/2019	Class: <ul style="list-style-type: none"> ▪ Supply Chain Integration ▪ Enterprise Resource Planning (ERP) Systems 	<ul style="list-style-type: none"> ▪ Textbook 1: Chapter 3 (up to page 90) ▪ Textbook 1: Chapter 4
4	30/9/2019	Lab: Room TBA <ul style="list-style-type: none"> ▪ E-Commerce ERP end-to-end implementation. 	<ul style="list-style-type: none"> ▪ Technology: Shopify ▪ Exercise: start online storefront, build and manage inventory, manage logistics, customer relationship management, run and manage sales transactions.
5	7/10/2019	Student Presentations: Business Model Presentations	
	14/10/2019	Statutory holiday. University closed.	
	21/10/2019	Fall Break. Classes suspended.	
6	28/10/2019	Class: <ul style="list-style-type: none"> ▪ Internet of Things (IoT) for supply chains 	<ol style="list-style-type: none"> 1. Ben-daya, M., Hassini, E., & Bahroun, Z. 2019. Internet of things and supply chain management: A literature review. <i>International Journal of Production Research</i>, 57(15–16): 4719–4742. 2. Porter, M. E., & Heppelmann, J. E. 2014. Managing the Internet of Things: How smart, connected products are changing the competitive landscape. <i>Harvard Business Review</i>, 92(11): 64–88.
7	4/11/2019	Class: <ul style="list-style-type: none"> ▪ Artificial Intelligence (AI) for supply chains 	<ol style="list-style-type: none"> 1. Min, H. 2010. Artificial intelligence in supply chain management: Theory and applications. <i>International Journal of Logistics Research and Applications</i>, 13(1): 13–39. 2. Calatayud, A., Mangan, J., & Christopher, M. 2019. The self-thinking supply chain. <i>Supply Chain Management: An International Journal</i>, 24(1): 22–38. 3. Craig, W. 2018. The supply chain gets smarter. <i>MWD Advisors White Paper</i>.

8	11/11/2019	Class: ■ Intelligent Conversational Systems (Chatbots) for supply chains	1. Shum, H. yeung, He, X. dong, & Li, D. 2018. From Eliza to XiaoIce: challenges and opportunities with social chatbots. <i>Frontiers of Information Technology and Electronic Engineering</i> , 19(1): 10–26. 2. Greenberg, P. 2018. Chatbots: Conversation for all of us. <i>Pitney Bowes White Paper</i>.
9	18/11/2019	Lab: Room TBA ■ Hands-on applications of IoT and AI in supply chains	■ Technology: Microsoft AI Platform, IBM Watson Platform ■ Exercise: Interactive demos on AI capabilities including language understanding, text analytics, and computer vision. ■ Exercise: Interactive demo on IoT capabilities including sensor networks and connectivity, field data collection and manipulation, and projections on supply chain applications.
10	25/11/2019	Class: ■ Term Paper Presentations Workshop	
11	2/12/2019	Student Term Paper Presentations	

ADDITIONAL INFORMATION

Course Sharing Websites

Materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

Required calculator in BUSI course examinations

If you are purchasing a calculator, we recommend any one of the following options: Texas Instruments BA II Plus (including Pro Model), Hewlett Packard HP 12C (including Platinum model), Staples Financial Calculator, Sharp EL-738C & Hewlett Packard HP 10bII

Group work

The Spratt School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more group tasks/assignments/projects in this course. Before embarking

on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A - = 80-84	B - = 70-72	C - = 60-62	D - = 50-52
F = Below 50			

Grades entered by Registrar:

WDN = Withdrawn from the course

DEF = Deferred

Academic Regulations

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here:

<http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/>

Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term.

For an accommodation request, the processes are as follows:

Pregnancy obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. carleton.ca/pmc

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and is

survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

<https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

For more information on academic accommodation, please contact the departmental administrator or visit: students.carleton.ca/course-outline

Academic Integrity

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another's ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated. Penalties may include; a grade of Failure on the submitted work and/or course; academic probation; a refusal of permission to continue or to register in a specific degree program; suspension from full-time studies; suspension from all studies at Carleton; expulsion from Carleton, amongst others. Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at: <https://carleton.ca/registrar/academic-integrity/>.

Sprott Student Services

The Sprott student services office, located in 710 Dunton Tower, offers academic advising, study skills advising, and overall academic success support. If you are having a difficult time with this course or others, or just need some guidance on how to successfully complete your Sprott degree, please drop in any weekday between 8:30am and 4:30pm. Our advisors are happy to discuss grades, course selection, tutoring, concentrations, and will ensure that you get connected with the resources you need to succeed! <http://sprott.carleton.ca/students/undergraduate/learning-support/>

Centre for Student Academic Support

The Centre for Student Academic Support (CSAS) is a centralized collection of learning support services designed to help students achieve their goals and improve their learning both inside and outside the classroom. CSAS offers academic assistance with course content, academic writing and skills development. Visit CSAS on the 4th floor of MacOdrum Library or online at: carleton.ca/csas.

Important Information:

- Students must always retain a hard copy of all work that is submitted.
- All final grades are subject to the Dean's approval.

- For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries, please send all email from your Carleton CMail account. If you do not have or have yet to activate this account, you may wish to do so by visiting <http://carleton.ca/ccs/students/>
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