



# BUSI - 3305 LOGISTICS AND TRANSPORTATION FALL - 2018

Instructor: Aaron L. Nsakanda, Ph.D., Associate Professor of Supply Chain

Management

Office: 903 Dunton Tower, phone: 520-2600 ext. 2210, email:

aaron.nsakanda@carleton.ca

Course location: CB3400

Timetable: Tuesdays 11:35am - 2:25pm Office hours: Mondays 4:30pm - 6:00pm

#### UNDERGRADUATE CALENDAR DESCRIPTION

Overview of logistics and transportation concepts, their roles in creating overall supply chain value. Strategic management and integration on the global basis of core activities, functions, and processes; network design and planning, performance metrics, recent trends in logistics and transportation.

# A. COURSE DESCRIPTION

Logistics and transportation operations involve getting the right good or service, in the right way, in the right quantity and right quality, in the right place at the right time, for the right customer at the right cost. The growing demand for a broad range of goods and services, the escalation in global trade, the increasing regulation, cost pressures and the worldwide competition are creating the need for greater operational effectiveness and efficiencies for logistics and transportation operations in both services and manufacturing organizations. This course is designed to convey the principles, techniques and methods employed in order to be effective in managing logistics and transportation operations domestically or internationally. Topics explored include strategic management and integration on the global basis of core logistics and transportation activities, functions, and processes; network design and planning; performance metrics; and recent trends in logistics and transportation. The material is organized to enable both participants to appreciate the value offered by a variety of management practices and concepts as means for transforming logistics and transportation operations in order to deliver better results. The format of the course consists of a mixture of lectures exposing the relevant materials, case solving and discussions, presentations to peers, and whenever possible the use of guest speakers and class field trips.

# **B. COURSE LEARNING OBJECTIVES**

Upon completion of this course, students should be able to:

(a) Develop an understanding of the strategic importance of logistics and transportation in the overall process of creating supply chain value, the formation of business strategy and the execution of successful operations.

- (b) Develop an understanding of activities, functions, and processes that comprise logistics and transportation; their interrelationship and how they affect customer service, corporate performance and competitive advantage.
- (c) Develop an understanding of the role and importance of various key logistics and transportation intermediaries that facilitate global trade.

# C. COURSE PREREQUISITES -

Third year standing and BUSI 2301 with a grade of C or higher, and STAT2606 with a grade of C- or higher. The School of Business enforces all prerequisites.

#### D. COURSE MATERIAL

# Required textbook

There is not a sole textbook for this course. Chapters from the following books will instead be used as references, given their broader fit with the course objectives:

Authors and title	Referenced chapters	
(a) Murphy, P. R., Wood, D. F. (2011): Contemporary Logistics, Tenth edition, Prentice Hall, 311 pages. (Hereafter [MW])	1*, 4, 10, 11, 12, and 14	
(b) Coyle, J. J., Novack, R.A., Gibson, B. J., Bardi, E. J. (2011): Transportation - A Supply Chain Perspective, Seventh edition, South-Western, 528 pages. (Hereafter [CNGB])	4*, 10, 11, and 12	
<ul><li>(c) Chopra, S., Meindl, P. (2013): Supply Chain Management</li><li>Strategy, Planning, and Operation, Fifth edition,</li><li>Pearson, 516 pages. (Hereafter, [CM])</li></ul>	4, 14*	
(d) Kasilingam, R.G. [1998]: Logistics and Transportation, Kluwer Academic Publishers, 297 pages. (Hereafter, [KR]	9*	

Chapters with (\*) will be made available electronically through the reserve library (ARES). A small number of reading materials (see section F for more details) will need to be purchased from Harvard Business Publishing.

# 2. Class notes and readings

The instructor's lecture notes will be available for download on the course website (see CuLearn).

# D. COURSE EVALUATION

The course evaluation will be based on four main activities: case study write-ups, a report and presentation on the Canadian transportation industry profile, case-based assignments, and a final exam. The weighting of each activity is as follows:

1. Case study managerial reports and presentation (2 equally marked)	30%
2. Case-based assignments (2 equally marked)	20%
3. Report and presentation on Canadian transportation industry profile	10%
4. Final examination (opened notes and books with no internet access)	40%
TOTAL	100%

# 1. Case study managerial reports and presentation (30%)

There will be a total of two case write-ups of quality suitable for consulting practice and a class presentation on one of the two cases. Each write-up (and the class presentation) will be done in groups (number of students per group to be determined). It must include (a) a cover letter, (b) an executive summary consisting of the more important results, conclusions, and recommendations; and (c) the main body consisting of answers to the assigned questions, assumptions and analyses that led to these answers. The managerial reports are handed in on the due date at the beginning of each class. An initial twenty (20) percentage points penalty applies to a late assignment and an additional ten (10) percentage points per day thereafter. Students are advised that managerial reports will not be returned back to them after being marked. However, they will be available for consultation in the instructor's office. Be sure to keep a copy for yourself. The time limit for a revision request is 1 week after the marks are communicated. Although discussions between participants are encouraged, no collaboration is allowed between groups.

# 2. Case-based assignments (10%)

There will be two case-based assignments. Students in groups (number to be determined) are required to submit a <u>typed</u> write-up consisting of answers to the assigned questions. Students are advised that assignment reports will not be returned back to them after being marked. However, they will be available for consultation in the instructor's office.

# 3. Report and presentation on Canadian transportation industry profile (10%)

Students in groups (number to be determined) will be assigned a sector of the Canadian transportation services (water and pipeline, air, rail, truck) and present a report that outlines, among others, (a) the contributions to the Canadian economy, (b) sector overview (the types of firms operating in the sector), (c) the operating and service characteristics of the sector.

# 4. Examination (40%)

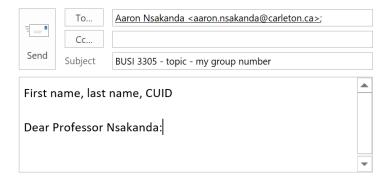
The final exam will be opened book, opened notes (with no access to the internet). This exam will be comprehensive (i.e., will cover all course materials) and questions will come from readings, case studies, in-class exercises, lecture notes. It may consist of multiple-choice questions, short-answer questions, essay questions, minicase analysis, or problems. University will establish and announce the date for the final exam. No make-up will be given for missing the final exam, except for documented and acceptable emergencies (as defined by university standard). Students are advised that exam papers will not be returned back to them after being marked. They will only be available for consultation at the instructor's office. More details will be discussed in class.

# E. COMMUNICATIONS VIA EMAIL

# 3305 EMAIL PROCEDURE

It is important to use the structure outlined in the template below:

- The subject of the email must begin with 3305 topic group number (if related)
- The first line in the body of the email must contain your first name, last name, your student number



#### F. CONDUCT

Professional conduct is built upon the idea of mutual respect. Such conduct entails (but is not necessarily limited to):

- Attending the class.

Each class benefits from the attendance and participation of all participants. Class attendance is mandatory. The participation grade will be affected by absences. If any circumstances prevent attendance to the class, the participant is responsible for all materials discussed, handouts distributed, assignments covered, and announcements made.

- Arriving on time.

Late arrivals are disruptive and show disrespect to those who are on time. Late arrivals are not allowed.

- Minimizing disruptions.

Participants are not allowed to leave and re-enter the class. All cell phones and electronic communication devices must be turned off during class. If an emergency situation requires keeping the cell phone turned on, it must be set in the silent mode and it is advised that the instructor be informed prior to the class starting. Participants should also avoid engaging in side conversations after class has begun.

- Focusing on the class.

Participants are not allowed to use laptops or hand-held devices for other tasks than notes taking while in class. Activities such as net surfing, and answering email are very disruptive both to neighbors and to the entire class.

- Being prepared for class.

Participants must be ready to discuss any assigned readings and to answer any assigned questions.

- Respect.

Participants should act respectfully toward all class participants.

# G. TENTATIVE SCHEDULE\*

Week(s)	date	Title	Topic(s)		
1	4/9	No class			
2	11/9	<ul> <li>Course introduction and overview</li> </ul>	○ Course outline		
		○ Logistics - What and Why?	○ Scope of logistics		
			<ul> <li>Economic impacts of logistics</li> </ul>		
			<ul> <li>Logistical relationship within the firm</li> </ul>		
			<ul> <li>Organizing logistics within the firm</li> </ul>		
			<ul><li>Professional logistic organizations</li></ul>		
	Reading	gs:	100000000000000000000000000000000000000		
		]: Chapter 1**			
	_	: Chapter 4 (pp 56-60)			
	_				
3	18/9	Logistics in practice			
		Case study and analysis met	thodology		
	Reading	Readings:			
		- 13			
	-	chase from Harvard Business Publ			
4	25/9	<ul><li>Warehousing - design and management</li></ul>	<ul> <li>Warehousing facilities value adding role and functionality</li> </ul>		
			<ul> <li>Warehousing network designing options</li> </ul>		
			<ul> <li>Warehousing tradeoffs</li> </ul>		
			<ul> <li>Selecting a warehousing network design</li> </ul>		
			<ul> <li>Warehousing ownership arrangements</li> </ul>		
			<ul><li>Warehousing operations</li></ul>		
			O Warehousing management systems		
	Reading				
	_	]: Chapter 10			
		]: Chapter 4 [pp 68-86]	o Fundamentals of mades to the		
5	2/10	<ul><li>Packaging and material handling</li></ul>	<ul> <li>Fundamentals of packaging and material handling</li> </ul>		
		nanuting	Material handling equipment		
	Pondin	gs: [MW] - Chapter 11	O Macerial Handling equipment		
6	9/10	· · · · · · · · · · · · · · · · · · ·	oconomy (Canadian industry profile)		
O	3/10	9/10 O Transportation in Canada's economy (Canadian industry profile) Readings:			
			portation industry*** (HBN #906D03,		
		available for purchase from Harvard Business Publishing)			
			ailable for download on CULearn)		
		O Transportation -	O Role of transportation and		
		Fundamentals	challenges in carrying this role		
			<ul> <li>Modes of transportation and their performance</li> </ul>		
			o Trade-offs in Transportation design		
			○ Tailored transportation		

		Readings:		
		- [CM]: Chapter 14**		
		- [MW]: Chapter 12		
7	16/10	○ Transportation - Fundamentals (cont'd)		
8	23/10	Reading week (no class)		
9-11	30/10	Managing logistics     Overview of global transportation		
		internationally - O Export preparation activities		
		transportation planning O Transportation planning		
		Readings		
		o [CNGB]: Chapter 10		
		O Bolloré Logistics Canada and the use of incoterms case study*** (17		
		pages, available for purchase from Harvard Business Publishing)		
	6/11	○ Managing logistics ○ Overview of global freight flows		
		internationally - O Global transportation providers		
		transportation execution O Port operations and customs		
		clearance		
		Readings:		
		o [CNGB]- Chapter 12		
	13/11	○ Managing logistics ○ X-/Party logistics (X=3,4,5)		
		internationally		
		- outsourcing		
		Readings:		
		O Shopclues: turning logistics into a competitive advantage case		
		study*** (10 pages, available for purchase from Harvard Business		
		Publishing)		
		<ul> <li>3M Canada: the health care supply chain case study*** (HBC # 9B15D011, 10 pages, available for purchase from Harvard Business Publishing)</li> </ul>		
	20/11	3		
12-13	27/11	Logistics and transportation in practice		
14	4/12	○ Measuring Logistics ○ Classification of logistics metrics		
		performance metrics O Issues in logistics metrics		
		○ Readings: [RK]- Chapter 9**		
		O Course wrap-up		

<sup>\*</sup>Every effort has been made to make the schedule as complete as possible, but there may be occasions where changes are required. The instructor will announce any deviations from the course outline in class.

\*\* Chapters available for download through ARES.

# H. SUMMARY OF DELIVERABLES

Deliverables	Due date
<ol> <li>Case study # 1 managerial report and presentation (based on CD case stuy)</li> </ol>	October 2, 2018
<ol><li>Report and presentation on Canadian transportation industry</li></ol>	October 9, 2018
<pre>3) case-based assignment # 1</pre>	October 30, 2018
3) Case study # 2 managerial report and presentation (based on 3M case study)	November 13, 2018
4) case-based assignment # 2	November 27, 2018

<sup>\*\*\*</sup> Materials available for purchase from Harvard Business Publishing.

#### I. IMPORTANT ADDITIONAL INFORMATION

# Course Sharing Websites

Student or professor 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 Sprott 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	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. <a href="https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf">https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf</a>

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 expulsion; suspension from all studies at Carleton; suspension from full-time studies; a refusal of permission to continue or to register in a specific degree program; academic probation; and a grade of Failure in the course, 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 a <a href="https://carleton.ca/registrar/academic-integrity/">https://carleton.ca/registrar/academic-integrity/</a>.

# - 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're 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! <a href="http://sprott.carleton.ca/students/undergraduate/learning-support/">http://sprott.carleton.ca/students/undergraduate/learning-support/</a>

Be in the know with what's happening at Sprott: Follow @SprottStudents and find us on Facebook SprottStudents Sprott.

# - 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/csa.

# Other 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, it would be easier to respond to your inquiries if you would send all email from your Carleton account. If you do not have or have yet to activate this account, you may wish to do so by visiting <a href="http://carleton.ca/ccs/students/">http://carleton.ca/ccs/students/</a>.

# K. Undergraduate Academic Calendar (2018-2029)

Available at http://calendar.carleton.ca/academicyear/.