

Faculty of Liberal Arts & Professional Studies School of Administrative Studies Master of Science in Management Practice

Reverse Logistics & Closed-Loop Supply Chain GS/MSMG 6570, Winter 2023

Course Syllabus

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Course Description:

This course explores reverse logistics and closed-loop supply chains with the goal of helping the students develop knowledge and expertise in this area. Reverse logistics refers to the process of planning, implementing, and controlling backward flows of raw materials, in process inventory, packaging and finished goods, from a manufacturing, distribution or use point to a point of recovery or proper disposal. Closed-Loop Supply Chain integrates reverse logistics into the conventional process of supply chain to account for both forward and reverse flows of products.

Prerequisites:

GS/MSMG 6550 Fundamentals of SCM, GS/MSMG 6510 Analytics for Supply Chain Management.

Textbooks:

- Flapper S. D., Van Nuene J. A., Van Wassenhove L. N. 2005. Managing Closed-Loop Supply Chains. Springer Berlin, Heidelberg, Germany. (Students can access electronic copy from York University Library: https://www.library.yorku.ca/web/)
- Ferguson ME, Souza GC. 2010. Closed-Loop Supply Chains: New Developments to Improve the Sustainability of Business Practices. CRC Press, Boca Raton, USA. (Students can access electronic copy from York University Library: https://www.library.yorku.ca/web/)
- Chopra, S. 2019. Supply Chain Management: Strategy, Planning and Operation, 7th edition, Pearson. (ISBN-13: 9780137502844)

Optional textbook:

• Dekker R., Fleishmann M, Inderfurth K., Van Wassenhove L. N. 2004. Reverse Logistics: Quantitative Models for Closed-Loop Supply Chains. Springer-Verlag, Heidlberg, Germany.

Supporting material (if any) will be posted on the course website or provided in class.



Case Studies

You may be required to purchase some case studies on-line. The links for purchasing the required cases will be posted on eClass or included in the revised course outline further during the term.

Grading Scheme:

Midterm Exam	20%
Final Exam	25%

Two Presentations 30% (15% each)

Final Report 25%

Total 100%

Grading component description:

Midterm Exam/ Final Exam:

There will be one midterm exam and one final exam. The midterm and Final exams may consist of multiple-choice questions and worded questions. The details of the midterm and final exams will be explained further during the term.

Presentations:

- 1. Each student will present one research project (qualitative or quantitative). Each student is expected to find an academic paper or a case study using Google, York University Libraries (https://www.library.yorku.ca/web/), or any other databases. Each student will present twice during the term. In the first presentation, students should report the research question(s), research approach, and related previous research. In the second presentation, students should briefly summarize the facts of the paper/case, state the decision situation, summarize the analysis, and conclude with recommendations and insights. A copy of each student's slides must be submitted to the instructor via eClass prior to the presentation: Friday presentation slides are due at 9:00am on the preceding Wednesday. The details of the presentations and instructions of slides submission will be explained further during the term.
- 2. In addition, each student will serve as a discussant for one presenter student on each presentation day. The presenter student's slides will be made available to the discussant student via the Course Website. At the end of each presentation, the discussant student will take the floor with their comments and questions. All other students are also encouraged to engage in the discussion.
- 3. Each presentation should not exceed 15 minutes. The discussion time should not exceed 5 minutes.

Final Report:

1. Each student will write a final report. The objective of the report is to apply the framework and techniques learned in the course to analyze a research topic of reverse logistics & closed-loop supply chain. Students can find their interested research topic in academic papers, case studies, news articles, or any sources. Students are expected to conduct qualitive and/or quantitative analyses of their research topics and conclude with their recommendations and/or insights.



- 2. The final reports should be <u>typed</u> (except for graphs). Each report should range between 5 and 8 pages, but it should not exceed 10 pages. The report should be 1.5 spaced in a size 11 font and have one-inch margins on all four sides of the page. Each page should be numbered. You will need MS WORD and EXCEL. Any other software will be discussed in class as needed.
- 3. The final report should be submitted via eClass. The due date and instructions of report submission will be explained further during the term.

Course Schedule and Reading List:

Note that the course schedule, topics, and readings below are subject to change as deemed appropriate/necessary by the instructor during the term. Please check the course website periodically for changes.

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Class	Date	Topics	Readings		
1		Introduction to reverse logistics (RL) and closed-loop supply chains (CLSCs)	Ferguson: Ch.* 1 & Ch. 2.1 Reference ** [1]: Introduction		
2		Facility location selection and network design of RL&CLSCs	Chopra: Chs. 4 & 5		
3		Collection and transportation issues in RL&CLSCs	Chopra: Ch.14		
4		Forecasting in managing product return	Chopra: Ch. 7		
5		Inventory control in RL&CLSCs	Chopra : Chs. 11 & 12		
6		1 st Presentation			
		Reading Week (No class)			
Class	Date	Topics	Readings		
7		Midterm Exam (in class)			
8		Production planning for product recovery	Ferguson: Ch. 7 Chopra: Ch. 8		
9		Product acquisition management	ТВА		
10		Coordination in RL&CLSCs	Chopra: Ch. 10		
11		Social, environmental, and other aspects of RL&CLSCs	Ferguson: Ch. 3		
12		2 nd Presentation			
	TBA	Final report due date			
		Final Exam (TBA)			

*Ch.: chapter

^{**}Reference: please refer to the following reference list.



References

[1] Kazemi, N., Modak, N. M., & Govindan, K. (2019). A review of reverse logistics and closed loop supply chain management studies published in IJPR: a bibliometric and content analysis. *International Journal of Production Research*, *57*(15–16), 4937–4960. https://doi.org/10.1080/00207543.2018.1471244

General Policy of Grading Component:

- 1. Concerns regarding marks will not be accepted after a week from the posting of the result.
- 2. Students must write their reports in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations.
- 3. Cheating will result in zero for involved students and necessary disciplinary measures outlined in the Senate Policy on Academic Honesty will be applied.
- 4. Students should not write the mid-term exam and final exam, or submit the final reports, unless they are on the class list. It is the student's responsibility to ensure that they are properly enrolled.
- 5. In case of a fire alarm during in person exams, students are to get up instantly, collect their personal belongings and leave the building. (They should not wait until a professor or an invigilator tells them to do so.)

RELEVANT UNIVERSITY REGULATIONS FOR WINTER 2023

Intellectual property notice

All materials prepared for COURSE GS/MSMG 6570 at York University are the intellectual property of the course instructors unless otherwise stated. This can include but is not limited to the following material: lecture notes, handouts and recordings; assignment handouts and instructions; spoken and written presentations; audio and video recordings; PowerPoint slides; and questions and/or solution sets for assignments, quizzes, tests and final exams.

Course materials should only be used by students enrolled in this course. As a student in this course, you may not publish, post on an Internet site, sell, or otherwise distribute any of this work without the instructor's express permission. Unauthorized or commercial use of these materials is strictly prohibited. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian copyright law. Copying this material for distribution (e.g. uploading material to a commercial third-party website, or online sharing of course material with people outside of the course) may lead to a charge of misconduct under York's Code of Student Rights and Responsibilities and the Senate Policy on Academic Honesty. In addition, you may face legal consequences for any violation of copyright law.

Accessibility

While all students are expected to satisfy the requirements of their program of study and to aspire to achieve excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to perform at their best. For more information about this policy, please refer to these guidelines and procedures: Academic Accommodation for Students with Disabilities.



The university encourages students with disabilities to register with Student Accessibility Services to discuss their accommodation needs as early as possible in the term. An Accessibility Counsellor will help you establish recommended academic accommodations, which will then need to be communicated to your course instructor(s) as necessary. Please let the course instructor(s) know as early as possible in the term if you anticipate requiring academic accommodation, so that your accommodation needs can be discussed and considered within the context of this course.

Policies related to Zoom meetings

Your course may involve the use of Zoom. Zoom is an online videoconferencing software that can be used to host lectures, tutorials or virtual office hours in real time.

Please note that Zoom is hosted on servers in the U.S. Zoom meeting content (e.g., video, audio and text chat) has been restricted to only pass through servers in Canada and US data centres; it will not pass through international data centres, such as those in China. Although it is not possible to exclude the US data centres at this time, Zoom is developing this functionality and will implement it as soon as possible. All audio, video, screen-sharing and text content will be encrypted in transit between your device and Zoom's servers, which will prevent unauthorized third parties from intercepting the content of your Zoom meeting. For more information, please visit Zoom at YorkU.

Privacy

The University works to ensure that the name you use with Zoom and metadata about how you use the application are stored on servers in Canada. If you have privacy concerns, you can disable both audio and video. You can also provide only your first name or a nickname when you join a session. If you choose to rename yourself, please let your instructor or TA know immediately.

You can rename yourself in 4 easy steps.

- 1. After entering the Zoom meeting, click on the Participants icon at the bottom.
- 2. Find your name in the Participants list on the right side of the Zoom window.
- 3. Hover over your name and click the Rename button.
- 4. Enter the name that you would like to use in the Zoom meeting and click OK.

Please note that lectures and/or tutorial sessions may be recorded so that they can be made available to students who are not able to attend class. Zoom is configured in such a way that all participants will be automatically notified when a session is being recorded. In other words, a session cannot be recorded without you knowing about it. If you do not wish to be seen or heard during a recorded session, please keep your camera and/or microphone turned off.

Participation

Your course instructor may enable you to ask questions through the chat panel. Inappropriate or disrespectful language in the chat panel will not be tolerated. You may also participate through Zoom's nonverbal feedback features. These features can be accessed by clicking on the Participants icon at the bottom of the window. Once the Participants sidebar is opened, you will see the option to Raise Hand. By clicking on Raise Hand, a blue hand will be raised. Please click on the Raise Hand button again to lower your hand once your question has been answered. You are tasked with using the various Zoom features in a responsible manner. Your course instructor and/or TA will reserve the right to remove anyone who does not behave accordingly.

Student conduct

Students, course instructors and staff have a joint responsibility to create and maintain a welcoming and inclusive learning environment. All students are expected to conduct themselves in accordance with the Code of Student Rights and Responsibilities. Whether online or in-person, students and course instructors are expected to cultivate and sustain a professional relationship characterized by mutual respect and courtesy. In all classrooms, any disruptive and/or harassing behavior will not be tolerated. To ensure that you adhere to the rules of the virtual classroom, please review what counts as proper 'netiquette' (the basic rules for communicating with others in online spaces) by consulting the student guide to e-learning. If you experience an inappropriate online incident that makes you feel unsafe or uncomfortable, please contact your course instructor immediately.

Please respect the privacy of your peers and instructors. Never share private information about your peers and instructors without their permission. Remember, no aspect of your courses should be recorded or distributed without everyone's consent.



Academic integrity

As a student at York University, you have a responsibility to not only understand, but also play an important part in upholding the integrity of the academic experience. The Faculty of Liberal Arts and Professional Studies at York University supports the International Center for Academic Integrity's definition of academic integrity. That is, you will be committed to acting in all academic matters, even in the face of adversity, with honesty, trust, fairness, courage, respect and responsibility.

How can you demonstrate academic integrity in the completion of your course?

- Respect the ideas of others: Your course work should represent your own knowledge and ideas. You should not falsely claim credit for ideas that are not your own, by presenting another's work as yours. If you are quoting, paraphrasing, or summarizing another person's work in order to support your own ideas, identify the work and the author through proper citation practices. For more information about how to cite properly, use the <u>Student Papers and Academic Research Kit (SPARK)</u>. You can improve your writing, research, and personal learning abilities through the Learning Commons.
- Respect your peers: Know when you are allowed to collaborate. Ask your instructor about what group work
 entails when it comes to the sharing of work. In test situations and assignments, don't steal or give answers
 to your peers. Cheating and aiding in a breach of academic honesty are both against York University's
 academic honesty policy.
- Respect your course instructor(s): Understand what the instructors are asking of you in class, in assignments, and in exams. If you are unsure, ask your professor or teaching assistant. They are committed to making you feel supported, and want to assess you fairly and with integrity. Please do not submit the same piece of work for more than one course without your instructor's permission.
- Respect yourself: When you act with integrity, you know that your work is yours and yours alone. You do not allow others to impersonate you on tests and exams. You do not buy or otherwise obtain term papers or assignments. You do the work. As a result, you know that you earned the grades that you receive, so you can be proud of your York degree. By acting with integrity in your course work, you are also practicing a valuable professional skill that is important in all workplaces.
- Take responsibility: If you have acted in an academically dishonest way, you can demonstrate courage and take responsibility for your mistake. You can admit your mistake to your course instructor as soon as possible.

Students who engage in academic dishonesty can be subject to disciplinary action under the Senate Policy on Academic Honesty. Your lack of familiarity with the Senate Policy and Guidelines on Academic Honesty does not constitute a defence against their application. Some academic offences can also constitute offences under the Criminal Code of Canada, which means that you may also be subject to criminal charges.

The Faculty of Liberal Arts and Professional Studies considers breaches of the Senate Policy on Academic Honesty to be serious matters. The Senate Policy on Academic Honesty is an affirmation and clarification for members of the University of the general obligation to maintain the highest standards of academic honesty. As a clear sense of academic honesty and responsibility is fundamental to good scholarship, the policy recognizes the general responsibility of all faculty members to foster acceptable standards of academic conduct and of the student to be mindful of and abide by such standards. Suspected breaches of academic honesty will be investigated, and charges shall be laid if reasonable and probable grounds exist.