

#### **COURSE INFORMATION**

Course title: Supply Chain Management

Course code: BASC 523 Credits: 1.5 Session, term, period: 2023W2, Period 4 Class location: HA 133

Section(s): O01 Class times: Monday and Wednesday

2:00 PM - 4:00 PM

Course duration: Mar 11 to Apr 20, 2024 Pre-requisites: n/a Division: Operations and Logistics Co-requisites: n/a

Program: MBA

### **INSTRUCTOR INFORMATION**

Instructor: Harish Krishnan

Phone: 604-822-8394 Office location: Zoom (see Canvas for link)

Email: <a href="mailto:harish.krishnan@sauder.ubc.ca">harish.krishnan@sauder.ubc.ca</a> Office hours: Wednesday

12:00pm-1:00pm

#### **COURSE DESCRIPTION**

Supply chain management involves the management of multiple value-creating processes that are typically fragmented and dispersed across organizational and national boundaries. This fragmentation creates opportunities (e.g. lower costs) but also challenges (e.g. longer lead times). Firms therefore need to find a way to exploit the benefits provided by fragmented supply chains, while making sure that the challenges are managed effectively. This course will expose students to several issues involved in managing supply chains, including sourcing, design, coordination, planning and execution. The goal of the course is to develop a framework which can be used to analyze and manage a firm's supply chain.

#### **COURSE FORMAT**

The course will include lectures, case discussions, in-class case activities and simulations. Please see detailed course schedule below.

## **LEARNING OBJECTIVES**

By the end of this course, students will be able to:

- 1. Identify market conditions where different supply chain outcomes (e.g. cost, responsiveness, etc.) are appropriate
- 2. Understand the key drivers of sourcing decisions in supply chains
- 3. Analyze total system costs (e.g. inventory and transportation costs) in supply chains, and determine how alternative supply chain network designs affect these costs
- 4. Construct and solve supply chain models in Excel
- 5. Apply appropriate forecasting and inventory management techniques to achieve desired cost and/orresponsiveness metrics in supply chains
- 6. Identify the challenges that arise in coordinating inventory and working capital in a multi-tier supply chain, and find solutions that align incentives and goals of supply chain partners
- 7. Identify challenges that arise due to lack of visibility in supply chains, and find technical and systemic solutions to problems that arise in complex supply chains with multiple stakeholders.
- 8. Identify the challenges and find solutions to challenges that arise in decarbonizing supply chains.

### SUSTAINABLE DEVELOPMENT GOALS (SDGS)

At UBC Sauder, we are committed to responsible business practices that can have transformative

BASC 523 001 1 February 19, 2024



impacts on society. One of the ways we are reinforcing our commitment to responsible business is by showcasing relevant content in our courses via the lens of the <u>United Nations Sustainable Development Goals</u>. In this course, we will touch on topics that relate to the following goals:

Goal 8: Decent Work and Economic Growth  8 DECENT WORK AND ECONOMIC GROWTH	Throughout the course, we will explore the role of people in making production processes (for all types of goods and services) more efficient and less wasteful. In particular, we will emphasize the importance of engaging people in their work as not just an end in itself, but as a crucial determinant of effective and efficient processes.
Goal 12: Responsible Consumption and Production  12 RESPONSIBLE CONSUMPTION AND PRODUCTION  CONSUMPTION	Throughout the course, we will explore ways that production processes (for all types of goods and services) can be made more efficient and less wasteful.

## **ASSESSMENTS**

#### Summarv

Weight
25%
35%
7.5%
7.5%
10%
15%
100%

## Details of Assessments

## Case reports:

- Case analysis guidelines will be posted on Canvas.
- Questions to guide the analysis will also be posted on Canvas.
- For group cases, cases will be formed for you (please see Canvas) and will change for each case.

## Case summaries:

- Case summaries are short summaries of the key issues in the case.
- Details and guidelines for the case summaries will be posted on Canvas.

# Supply chain game:

- Groups of students will play an online supply chain game: Harvard's Global Supply Chain Simulation.
- Groups will be formed for you (please see Canvas).
- Marks will be assessed on the performance in the game, and a short report.
- Details for the report will be provided on the course website.

<u>BASC 523 001 2 February 19, 2024</u>



## **Class Participation:**

Please be ready and willing to actively engage in all aspects of the classroom learning experience. We all
have something to contribute to the collective learning experience each day, and we all want to benefit
from it.

#### LEARNING MATERIALS

#### Required:

- 1. Course pack containing Harvard cases and simulations (details about purchasing this will be on Canvas).
- 2. Class notes (will be posted on Canvas: login using https://canvas.ubc.ca).
- 3. Links to some required (and some recommended) readings will be posted on a library reading list available through Canvas.
- 4. Syllabus (will be posted on course website).

#### COURSE-SPECIFIC POLICIES AND RESOURCES

Missed or late assignments, and regrading of assessments

Late submissions will not be accepted and will receive a grade of zero.

#### Academic Concessions

If extenuating circumstances arise, please contact the RHL Graduate School program office as early as reasonably possible, and submit an <a href="Academic Concession Request & Declaration Form">Academic Concession Request & Declaration Form</a>
<a href="https://webforms.sauder.ubc.ca/academic-concession-rhlee">https://webforms.sauder.ubc.ca/academic-concession-rhlee</a>. If an academic concession is granted during the course, the student will be provided options by RHL, or by the instructor in consultation with RHL, per UBC's policy on Academic Concession.

## Other Course Policies and Resources

#### Assignment submission details:

All assignments must be submitted in the manner specified on the course website.

## **Grading:**

Individual case summaries will be marked on a "CheckPlus/Check/CheckMinus" scale. These will then be converted into a number. Usually, a "Check" means an "average" submission and will receive approximately 80%. CheckPlus will receive more than this and CheckMinus will receive less. The exact percentage mark for CheckPlus and CheckMinus will depend on the quality of the submissions. Also, all CheckPlus submissions and all CheckMinus submissions need not receive the same percentage mark. Some differences in quality may be accommodated by assigning different percentage marks. For example, while most CheckMinus submissions may receive 75%, a really bad submission may receive a much lower mark. Also, while most CheckPlus submissions may receive 85%, a really outstanding submission may receive a higher mark. In general, a "CheckPlus" means that the submission is thorough and thoughtful. This means that the key issues in the case were clearly identified, appropriate analysis was discussed, and recommendations were clearly justified. "Check" means that it the submission is satisfactory but with room for improvement. For example, the issues were clearly identified but the analysis and recommendations were not as compelling as they could be. Finally, "CheckMinus" means that the submission was unsatisfactory with significant room for improvement. For example, the key issues were not identified or discussed, and/or the analysis and recommendations were unclear or unsupported by facts. Again, if there are any

<u>BASC 523 001 3 February 19, 2024</u>



questions, please e-mail me and I am happy to meet individually to address your concerns.

• Group case reports will be marked out of a certain number of points, e.g. 20 points (please see assessment summary). Evaluation of the case reports will be based on the clarity of the report, the depth of the analysis, the logic of arguments, the effective use of fact and opinion from the case to defend arguments, and the appropriateness of the issues identified. Considerable attention will be paid to the quantitative analyses. The reasonableness of assumptions chosen to guide the analysis will enter in as well. Again, if there are any questions, please e-mail me and I am happy to meet with your group to address your concerns.

#### A note about case solutions:

- If you search online, you may be able to find "solutions" to case studies. These are typically assignments that students at other universities have submitted and uploaded to some repository. Given the availability of these online "solutions", it may be useful for me to remind you about the reason we do case studies.
- Each of you has a unique perspective and understanding of the topics that we study in this course. Your case submissions give you an opportunity to articulate your perspective and, by doing so, you contribute to your own learning and to the learning of the class. Looking for the "correct" answer online does not benefit you. In fact, it hurts you because it constrains your ability to learn. Furthermore, it exposes you to the risk of academic misconduct.
- Maintaining the highest standard of academic integrity enhances your educational experience, both
  individually and as a cohort. I fully expect that you are committed to getting the best possible
  experience from this program.

#### A note about feedback:

- This is a case-heavy course. Grading cases can be time consuming. There is usually not one "correct" approach to a case, and students often provide diverse responses each of which may consist of a well-thought argument. These nuances can be hard for a marker to pick up. As a result, I often grade cases by myself. A downside of this approach is that it is not always possible to provide quick feedback. Students however often request quick feedback. While I will make an effort to provide feedback as quickly as possible, I would like to emphasize a few ways that students can proactively address this issue.
- First, note that after each case is submitted, it is discussed in class. This class discussion is a form of feedback. Although it is not individualized feedback, I am happy to have one-on-one discussions withstudents in case they want to discuss their approach to the case and how it compared to what was discussed in class. In other words, after the case discussion, if you want to discuss your case write up,I am happy to do so.
- Second, graded assignments are not the only form of feedback. While you are waiting for a particular assignment to be returned, if you have questions, I am happy to meet and discuss this with students.
- Third, I am happy to discuss any questions you have about an upcoming assignment. This is often done over e-mail (because cases are often due after a weekend), but please consider this as a form offeedback as well.
- Finally, at the end of the course, if you would like to receive feedback on specific assignments, I am happy to provide it.

<u>BASC 523 001 4 February 19, 2024</u>



# POLICIES APPLICABLE TO COURSES IN THE ROBERT H. LEE GRADUATE SCHOOL

#### *Attendance*

Excepting extenuating circumstances, students are expected to attend 100% of their scheduled class hours. Absent students limit their own academic potential, and that of their classmates, and cause unnecessary disruption to the learning environment. Students missing more than 20% of the total scheduled class hours for a course (including classes held during the add/drop period) without having received an academic concession will be withdrawn from that course. Withdrawals, depending on timing, could result in a "W" or an "F" standing on the transcript.

## **Punctuality**

Students are expected to arrive for classes and activities on time and fully prepared to engage. Late arrivals may be refused entry at the discretion of the instructor or activity lead. Students arriving later than halfway through a scheduled class will be treated as absent for that class.

#### *Electronic Devices*

Devices such as laptops, tablets, and cell phones are not permitted to be used in class unless directed by the instructor for in-class activities. Students who do not follow the School's policy in this regard may be required to leave the room for the remainder of the class, so that they do not distract others. Research shows that students' use of laptops in class has negative implications for the learning environment, including reducing their own grades and the grades of those sitting around them.

## Citation Style

Please use the American Psychological Association (APA) reference style to cite your sources.

Details of the above policies and other RHL Policies are available at: <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625</a>

## **UNIVERSITY POLICIES AND RESOURCES**

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available on the UBC Senate website at <a href="https://senate.ubc.ca/policies-resources-support-student-success">https://senate.ubc.ca/policies-resources-support-student-success</a>.

## Respect for Equity, Diversity, and Inclusion

The UBC Sauder School of Business strives to promote an intellectual community that is enhanced by diversity along various dimensions including status as a First Nation, Metis, Inuit, or Indigenous person, race, ethnicity, gender identity, sexual orientation, religion, political beliefs, social class, and/or disability. It is critical that students from diverse backgrounds and perspectives be valued in and well served by their courses. Furthermore, the diversity that students bring to the classroom should be viewed as a resource, benefit, and source of strength for your learning experience. It is expected that all students and members of our community conduct themselves with empathy and respect for others.

<u>BASC 523 001 5 February 19, 2024</u>



#### Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records arekept in order to monitor and prevent recurrences.

## *Use of Artificial Intelligence*

# **Generative AI (Including ChatGPT) Not Permitted**

Any work submitted must be your own original work, written without outside assistance or collaboration. Any use of generative artificial intelligence (AI), including ChatGPT, is not permitted and constitutes academic misconduct. Any student suspected of submitting work that includes AI generated content may be asked for preliminary work or other materials to evidence the student's original and unaided authorship. The student may also be asked to separately explain or support their work. AI identification methods may also be employed by the instructor. After review, if it is determined by the instructor that submitted work likely contains AI generated content, the work may receive a zero and may be subject to further misconduct measures set out in the UBC Academic Calendar.

## **COPYRIGHT**

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline and could be subject to legal action. Any lecture recordings are for the sole use of the instructor and students enrolled in the class. In no case may the lecture recording or part of the recording be used by students for any other purpose, either personal or commercial. Further, audio or video recording of classes are not permitted without the prior approval of the Instructor.

### **ACKNOWLEDGEMENT**

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəÿəm (Musqueam) people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

## ONLINE TEACHING TOOL & REQUIREMENTS

This course might be taught using Zoom for synchronous classes and office hours.

For this course, you might be required to use a Zoom account during synchronous classes and office hours. If you do not have a Zoom account, you can create one here: <a href="https://zoom.us/signup">https://zoom.us/signup</a>. Note: creating a Zoom account requires that you provide a first name, last name, and email address to Zoom. For privacy purposes, you may consent to using your existing email address and your real name.

<u>BASC 523 001 6 February 19, 2024</u>



Alternatively, if you prefer, you may sign up using an alternative email address and an anonymized name that does not identify you (i.e. Jane Doe, <a href="mailto:jane.doe@email.com">jane.doe@email.com</a>). If you have trouble creating an account, or accessing a Zoom session, please contact <a href="mailto:CLCHelp@sauder.ubc.ca">CLCHelp@sauder.ubc.ca</a>. You will be required to provide the email address associated with your Zoom account in a Canvas quiz for identification purposes. To help replicate the classroom experience, make sessions more dynamic and hold each person accountable, both students and instructors are required to have their cameras on during Zoom sessions. Students who require an accommodation with regard to the "camera on" requirement must contact their instructors in advance of the first class to discuss options. As professional graduate students, students are expected to conduct themselves professionally by joining sessions on time, muting mics when not speaking, refraining from using any other technology when in-session, attending in business casual dress (at a minimum), and participating from a quiet environment. Content from synchronous sessions will be selectively recorded per instructor discretion and made available to students on Canvas for a maximum duration of the course length. This is done to allow students the opportunity to return tolecture content to solidify learnings.

#### **COURSE SCHEDULE**

(Subject to change with class consultation)

For readings and resources for each class, please see the course website

Week	Date	Topic	Assessments due
1	Mar 11	<ul> <li>Course overview</li> <li>Introduction to supply chains         <ul> <li>The past, the present, the future</li> </ul> </li> <li>Supply chain management</li> <li>Supply chain outcomes         <ul> <li>Design, coordination, planning and execution</li> </ul> </li> </ul>	Foxconn (individual summary)
	Mar 13	<ul> <li>Supply chain design: sourcing (facility location)</li> </ul>	<ul> <li>Fuyao Glass         America (individual summary)     </li> </ul>
	Mar 18	Supply chain finance	<ul> <li>P&amp;G (group report)</li> </ul>
2	Mar 20	<ul> <li>Supply chain design: network design</li> <li>Inventory and transportation cost drivers</li> <li>Cycle stocks and safety stocks</li> <li>Use of continuous and periodic review models</li> <li>Inventory pooling (with demand correlation)</li> <li>Transport mode choice</li> <li>Impact of centralization and decentralization on inventory and transportation costs</li> <li>What is the right supply chain for your products, and what are the right products for your supply chain?</li> <li>Product design and supply chains</li> </ul>	
	Mar 25	<ul> <li>Supply chain design: network design cases</li> <li>Discuss Alko case</li> <li>Start in-class case: HP</li> </ul>	Alko (group report)
3	Outside Class Activity	Finish the HP case that was started in the previous class	

<u>BASC 523 001 7 February 19, 2024</u>



**ROBERT H. LEE**GRADUATE SCHOOL

Syllabus

			Syllabas
	Mar 27	<ul> <li>Supply chain coordination, planning and execution</li> <li>Managing a responsive supply chain</li> <li>Forecasting</li> <li>Inventory management</li> <li>Simulation game set-up</li> </ul>	<ul> <li>HP (short group report)</li> </ul>
	Outside Class Activity	<ul> <li>Supply chain coordination, planning and execution</li> <li>Managing a responsive supply chain</li> <li>Global Supply Chain Simulation</li> </ul>	<ul> <li>Complete         simulation in teams         outside class</li> <li>Supply chain game         report (group) due         by Apr 2 11:59pm</li> </ul>
4	Apr 3	<ul> <li>Guest lecture: supply chain sustainability</li> <li>Kinaxis: Polly Mitchell-Guthrie and John Nafis</li> <li>Supply chain coordination, planning and execution</li> <li>Managing a responsive supply chain</li> <li>Global Supply Chain Simulation debrief</li> </ul>	
	Apr 5	<ul> <li>Supply chain management and sustainability</li> <li>Discuss Sian Flowers case</li> </ul>	<ul> <li>Sian Flowers (individual summary)</li> </ul>
5	Apr 8	<ul> <li>Supply chain coordination, planning and execution</li> <li>Managing an efficient supply chain</li> <li>In-class exercise: Root beer game</li> </ul>	
,	Apr 10	<ul><li>Supply chain management and sustainability</li><li>Course wrap-up</li></ul>	<ul> <li>H&amp;M (individual summary)</li> </ul>
	Submit on Ca	nvas (RHL to finalize deadline during exam week).	<ul> <li>Decarbonization at BMW (individual report)</li> </ul>

<u>BASC 523 001 8 February 19, 2024</u>