COURSE INFORMATION

Course title:	Process Fundamentals				
Course code:	BASC 500	Credits:	1.5		
Session, term, period:	2023W2	Class location:	HA 133		
Section(s):	301	Class times:	Saturdays: Apr 6, Apr 20, May 4 8:30am-4pm		
Course duration:	Apr 6 to May 19, 2024	Pre-requisites:	n/a		
Division:	Operations and Logistics	Co-requisites:	n/a		
Program:	РМВА				
INSTRUCTOR INFORMATION					
Instructor:	Harish Krishnan				
Phone:	604-822-8394	Office location	: Online (Zoom link on Canvas)		
Email:	harish.krishnan@sauder.ubc.ca	Office hours:	Wednesday		
			12:00pm-1:00pm		

COURSE DESCRIPTION

An organization's success depends on how efficiently and effectively it *executes* its strategic goals. This requires a detailed understanding of the *processes* that are used to produce and deliver goods and/or services to customers. This module will help students understand how work flows (and should flow) through an organization, and how resources should be organized and allocated to achieve desired outcomes. Topics covered include process analysis, capacity analysis, process design, theory of constraints, and lean operations, the impact of digitization on business processes, and the challenges that arise in process and operations management. This module is designed not only to serve students interested in pursuing a career in operations and supply chain management, but also those students who want to understand the fundamental principles of how to design processes that can help organizations of all kinds achieve their purpose.

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:

- Map processes.
- Perform capacity analysis and identify bottlenecks.
- Understand Little's Law and the relationship between throughput, flow time and in-process inventory.
- Understand and quantify the impact of uncertainty on process performance
- Be able to articulate the key principles of lean management.

BE ABLE TO APPLY THE ABOVE CONCEPTS AND TOOLS TO SPECIFIC CASES.

SUSTAINABLE DEVELOPMENT GOALS (SDGS)

At UBC Sauder, we are committed to responsible business practices that can have transformative 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</u> <u>Goals</u>. In this course, we will touch on topics that relate to the following goals:

Goal 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	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

Summary

<u>Component</u>	Weight
Discussion board response to Alcoa case	5%
Individual case summaries	15%
Group case analyses	50%
Class participation	15%
Final assignment	15%
Total	100%

Details of Assessments

Group case analyses:

- Group case analyses are required; please see detailed course schedule below.
- Groups will be formed for you (please see Canvas) and will change for each case.
- Details and guidelines for the group case analyses will be posted on Canvas.

Individual case summary details:

- Individual case summaries (short summaries of the key issues in the case) are required; please see detailed course schedule below.
- Details and guidelines for the case summaries will be posted on Canvas.

Final assignment:

- One final assignment is required; there is no final exam.
- Questions for the final assignment will be posted on Canvas.

Other details about assignments:

• Students are free to *discuss* the individual assignments with each other, but each student must complete and submit the assignments individually.

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

Course Materials:

Required:

- 1. Course pack containing Harvard cases (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 <u>Academic Concession Request & Declaration Form</u> <u>https://webforms.sauder.ubc.ca/academic-concession-rhlee</u>. 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 <u>UBC's policy on Academic Concession</u>.

Other Course Policies and Resources

Assignment submission details:

- Assignments must be submitted at the time and in the manner specified on Canvas.
- All out-of-class submissions must be uploaded to the course website (deadline specified on course website).

Grading:

• <u>Individual case summaries</u> 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 questions, please e-mail me and I am happy to meet individually to address your concerns.

• <u>Group case analyses</u> will be marked out of a certain number of points, e.g., 25 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:

- Any work submitted must be your own original work, written without outside assistance or collaboration.
- 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

with students 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 of feedback 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.

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: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625

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 <u>https://senate.ubc.ca/policies-resources-support-student-success</u>.

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.

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 are kept 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 <u>UBC Academic Calendar</u>.

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 xwma0kwayam (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 are 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: <u>https://zoom.us/signup</u>. 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. 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, <u>jane.doe@email.com</u>). If you have trouble creating an account, or accessing a Zoom session, please contact <u>CLCHelp@sauder.ubc.ca</u>. 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 to lecture content to solidify learnings.

COURSE SCHEDULE

(Subject to change with class consultation)

Week	Date	Торіс	Readings	Assignments Due		
	Before the course starts, please purchase the course pack containing Harvard cases (details about					
purchasing this will be on Canvas). Please see your Assignments in Canvas for details.						
Please s	Class 1: 8:30am- 10:00am	Course overview Introduction to Processes House building game	Introduction slides			
	Coffee break: 10:00am-10:15am					
	Class 2: 10:15am- 11:30am	Alcoa case discussion	Alcoa case	Day 1 deliverables: Alcoa case discussion board response		
		Short break: 11:30am-11:4	Dam			
Sat, Apr 6	Class 2 (contd.): 11:40am- 12:20pm	Wrap up introduction to processes	Introduction slides			
		Lunch break: 12:20pm-1:20p	om			
	Class 3: 1:20pm- 2:30pm	Process analysis	Process analysis slides			
	Coffee break: 2:30pm-2:45pm					
	Class 3 (contd.): 2:45pm- 4:00pm	Process analysis continued	Process analysis slides			
	Class 4: 8:30am- 10:20am	National Cranberry case discussion	National Cranberry case			
	Coffee break: 10:20am-10:40am			Day 2		
	Class 5: 10:40am- 12:30pm	Impact of variability in processes	Variability slides	deliverables:		
Sat, Apr 20	Lunch break: 12:30pm-1:30pm			Cranberry case group analysis		
7.01 20	Class 6: 1:30pm- 3:00pm	Shouldice case discussion	Shouldice case	Shouldice case		
	Coffee break: 3:00pm-3:15pm			summary		
	Class 7: 3:15pm- 4:00pm	Lean operations and Quality Management	• Lean and quality slides			
Sat, May 4	Class 8: 8:30am- 10:20am	Vanguard Retail case discussion	Vanguard Retail case	Day 3 deliverables:		
		Coffee break: 10:20am-10:40	am			



	(Revisit) Class 7: 10:40am- 11:40pm	Lean operations and Quality Management (contd.)	 Lean and quality slides 	Vanguard Retail case group analysis
	Class 10 (prep): 11:40pm- 12:30pm	Breakout groups to review Trouble at Tessei case	Trouble at Tessei case (no written submission)	Toyota case <u>individual</u> <u>summary</u>
	Lunch break: 12:30pm-1:30pm			<u>Read</u> Trouble at Tessei case
	Class 9: 1:30pm- 2:45pm	Toyota case discussion	Toyota case	(no submission)
	Short break: 2:45pm-3:00pm			
	Class 10: 3:00pm- 3:45pm	Trouble at Tessei case	Trouble at Tessei case (no written submission)	
	<mark>3:40pm-</mark> 4:00pm	Course wrap-up	Course wrap up notes	
May 19				Final assignment