



#### **COURSE INFORMATION**

Course title: Operations

Course code: BASC550 Credits: 1.5 Session, term, period: 2020W, Period 4 Class location: Zoom

Section(s): MM1 Class times: Tue. Thur. 10:00 – 12:00

Course duration: April 12 to May 22, 2021 Pre-requisites: n/a Division: Operations and Logistics Co-requisites: n/a

Program: MM

### **INSTRUCTOR INFORMATION**

Instructor: Dr. Sha Liao

Phone: 6048220973 Office location: Zoom

Email: sha.liao@sauder.ubc.ca Office hours: Thu. 12:00 - 13:00

### **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 used to produce and deliver goods and/or services to customers. This course will provide students with the managerial tools needed to understand and articulate the impact of an organization's business processes, and the ability to analyze and continuously improve these business processes. Many concepts in this course are fundamental for advanced topics such as supply chain management.

### **COURSE FORMAT**

Class meet twice per week face-to face; each lecture is 2 hours.

### **LEARNING OBJECTIVES**

By the end of this course, students will be able to carry out business process analysis from an operations perspective, and apply quantitative and qualitative tools to problems including:

- Bottleneck analysis
- Process quality improvement
- Waiting line analysis
- Decision tree analysis
- Simple linear optimization

## **ASSESSMENTS**

## **Summary**

Component	Weight
4 Group cases (Toyota, Safe birth, TRIAS, Red Brand) each 8%	32%
2 Individual cases (Kristen's cookie, Shouldice) each 5%	10%
Final exam	48%
Class participation	10%
Total	100%

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Details of Assessments

## **Group Cases and Individual Cases:**

There are group cases and individual cases. You are required to acknowledge any book or person you have consulted. The objective in these assignments is to ensure that you have put in an honest effort to prepare the case, to ensure that students have given sufficient thoughts to the question and have considered relevant issues. Cases are due before the start of the class. Both group and individual cases need to be submitted on time, no late submission will be accepted. When you write your report, state your assumptions clearly and present what you consider to be the most important issues and the most effective recommendations. Please avoid repetition of case facts.

In case of a joint submission, no more than 4 students voluntarily form groups. Your memo should be in pdf format (single spaced, 11-point font) and is no more than 3 pages (not including appendix). E-mail one copy of the report on behalf of entire group, and copy all group members, to sha.liao@sauder.ubc.ca. For individual cases, please submit your memo through canvas. Your memo should be in pdf format (single spaced, 11-point font) and is no more than 2 pages (not including appendix).

## **Final Exam:**

Final exam will be open book and open notes. You are allowed to bring a non-graphic calculator. Computers, cell phones and other electronic devices with possible internet connections are not allowed.

# **Class Participation:**

The participation grade is based on the instructor's evaluation of the quality of each student's progress and contribution during the semester. Please carefully read all assigned materials, make serious attempt to complete exercises and answer assigned questions, and be ready and willing to actively engage in the classroom learning experience. Students may be asked to explain concepts in class. The implicit assumption is that we all have something to contribute to the collective learning experience each day, and we all want to benefit from it. Coming prepared will maximize the benefits for everyone. Class participation will be evaluated based on each student's comments and contributions to the class discussions. The participation grade will be assessed in the most objective way possible; I will keep track each of your contributions.

## **LEARNING MATERIALS**

### Required Reading Materials:

- Class notes and other materials (posted on canvas)
- Case Packet (instruction in the Appendix), Benihaha, TRIAS, Red Brand
- Cases on canvas (canvas→ library online reserve), Kristen, Shouldice, Toyota

### Recommended Reading Materials:

• G. Cachon and C. Terwiesch. Matching Supply with Demand. (3rd edition)

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### 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

Email: Please follow these guidelines of email etiquette when emailing the professor.

- In the "From" field, be sure to display your correct name (no email nicknames please).
- Write a brief but clear Subject line that identifies the main issues in the email.
- In the body of your email, include your full name and student number, the course number and section number.
- Use one email address for all correspondence.

Classroom Expectations, Behavior and Code of Conduct: All students are expected to use common sense when attending lectures and labs with respect to attendance, being on time, cell phone and laptop use, participation and interactions with others.

As well, students can expect the instructor to:

- Design, develop and deliver course materials to the highest possible standard.
- Be attentive of, and respectful to, everyone in the room.
- Create an atmosphere where students treat all others appropriately.

## 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.

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#### 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.

# 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.

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# Academic Freedom and Students Studying from Outside Canada

During this pandemic, the shift to online learning has greatly altered teaching and studying at UBC, including changes to health and safety considerations. Keep in mind that some UBC courses might cover topics that are censored or considered illegal by non-Canadian governments. This may include, but is not limited to, human rights, representative government, defamation, obscenity, gender or sexuality, and historical or current geopolitical controversies. If you are a student living abroad, you will be subject to the laws of your local jurisdiction, and your local authorities might limit your access to course material or take punitive action against you. UBC is strongly committed to academic freedom, but has no control over foreign authorities (please visit <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,33,86,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,33,86,0</a> for an articulation of the values of the University conveyed in the Senate Statement on Academic Freedom). Thus, we recognize that students will have legitimate reason to exercise caution in studying certain subjects. If you have concerns regarding your personal situation, consider postponing taking a course with manifest risks, until you are back on campus or reach out to your academic advisor to find substitute courses. For further information and support, please visit: <a href="http://academic.ubc.ca/support-resources/freedom-expression">http://academic.ubc.ca/support-resources/freedom-expression</a>

### **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 consent of the instructor. Students may not share class Zoom links or invite others who are not registered to view sessions.

### **ACKNOWLEDGEMENT**

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the  $x^w m \theta k^w \partial \theta m$  (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 will 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: <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. 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

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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) All classes are Synchronous

	CLASS TOPICS	CONTENT / ACTIVITIES	WHAT'S DUE
Class 01 (April 13)	Introduction to Operations Process Flow Analysis (1)	Capacity Analysis	
Class 02 (April 15)	Process Flow Analysis (2)	Kristen's Cookie Little's Law	Kristen's Cookie
Class 03 (April 20)	Process Quality (Dr. Mahesh Nagarajan)	Toyota Case	Toyota Case
Class 04 (April 22)	Process Flow Analysis (3)	The Safe Birth Clinic Inventory Build-up	The Safe Birth Clinic
Class 05 (April 27)	Process Flow Analysis (4)	Shouldice Hospital	Shouldice Hospital
Class 06 (April 29)	Variability in Processes (1)	OM Triangle	
Class 07 (May 4)	Variability in Processes (2)	Waiting Line Analysis	Recommended Reading: Decision Trees
Class 08 (May 6)	Decision Tree Analysis	TRIAS	TRIAS
Class 09 (May 11)	Introduction to Optimization	Red Brand Canners	Red Brand Canners
Class 10 (May 13)	Operations, Strategy & Financial Impact	Benihana Case	
Week of May 17	Exam		Date & Time TBD by RHL Office

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### **APPENDIX**

## Greetings,

This message explains how to purchase materials needed for your course.

Course: Operations Professor(s): Sha Liao Starting: Apr 13, 2021 Ending: May 13, 2021

- 1. Go to the Ivey Publishing website at www.iveycases.com
- 2. <u>Log in</u> to your existing account or click <u>"Register"</u> to create a new account and follow the prompts to complete the registration. If registering, choose the "Student User" role.
- 3. Click on this link or copy into your browser: https://www.iveycases.com/CoursepackView.aspx?id=27907
- 4. Click "Add to Cart".
- 5. You may choose to order in either **print** or **digital format**.
  - o To order the material in digital format, check "digital download" and click "OK".
  - To order a printed copy for delivery, enter the print quantity required and click "OK". Please note that shipping charges will apply.
- 6. Go to the Shopping Cart (located at the top of the page), click "Checkout", and complete the checkout process.
- 7. When payment has been processed successfully, an Order Confirmation will be emailed to you immediately and you will see the Order Confirmation screen.
  - If you ordered digital copies: Click "Download your Digital Items" or go to "My Orders" to access the file.
  - If you ordered printed copies: Your order will be printed and shipped within 2 to 3 business days.

IMPORTANT: Access to downloadable files will expire 30 days from the order date, so be sure to save a copy on your computer. The downloadable file is a PDF document that can be opened using Adobe Reader.

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**Business Hours:** 

Monday to Thursday: 8:00am-4:30pm (ET)

Friday: 8:00am-4:00pm (ET)

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