

Program: Full-time MBA Course Outline

#### **COURSE INFORMATION**

| Division: Operations and Logistics    | Term/period: Period 2                   |                  |  |  |  |  |
|---------------------------------------|-----------------------------------------|------------------|--|--|--|--|
| Instructor: Greg Werker               |                                         |                  |  |  |  |  |
| Email: greg.werker@sauder.ubc.ca      |                                         |                  |  |  |  |  |
| Office: HA 479                        | Office hours: By appointment            |                  |  |  |  |  |
| Section number: 001<br>002            | T/Th 8 am – 10 am<br>T/Th 10 am – 12 pm | HA 132<br>HA 133 |  |  |  |  |
| Course duration: Oct 29 – Dec 8, 2017 |                                         |                  |  |  |  |  |

### **BRIEF COURSE DESCRIPTION**

Every organization either manufactures a product, or provides a service, or both. "Operations" refers to the set of business processes that produce the product or service. "Logistics" refers to the set of business processes that procure inputs and distribute the finished product or service to the customer. A network of operations and logistics functions that spans several companies and many functional areas within those companies — usually referred to as a "supply chain" — is needed to convert raw materials into finished goods. This component of the MBA program will introduce students to supply chain management (SCM), the key concepts and tools needed to understand and effectively manage supply chains. A key concept in this course is the "business process", and managing and improving such processes. Since every functional area of business includes processes, most of the material will be relevant to managers in all functional areas across various industries.

## **COURSE MATERIALS & REQUIREMENTS**

### **Required materials:**

- 1. Course pack containing cases and background readings (see Canvas).
- 2. Class notes (will be posted on Canvas).
- 3. Other required readings (links will be posted on Canvas).



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### ASSESSMENT

| 20% |
|-----|
| 10% |
| 15% |
| 45% |
| 10% |
|     |

**Homework:** Three homework assignments must be completed individually; while it is ok to discuss the HW with classmates, <u>solutions must be entirely your own work</u>. HW will be posted at least one week prior to the due date on Canvas, and must be submitted on time to receive credit.

- HW1 due Sunday, Nov 11, by 11pm.
- HW2 due Sunday, Nov 18, by 11pm.
- HW3 due Saturday, Dec 8, by 11pm.

**Prep Questions:** Most of the classes have a short question due before the start of class (posted and submitted on Canvas). Prep questions <u>must be completed individually</u>.

**Group case memo:** The case memo is to be completed in a group. Details and guidelines will be posted on Canvas.

**Exam:** The exam covers all material from class, lecture notes, prep questions, cases, and assignments. Students must take the exam at the scheduled time unless arrangements have been made with The RHL Office.

Attendance/participation: After each class you will assign yourself a score as follows:

- 0 = Absent.
- 0.5 = Arrived late and/or returned late after the break.
- 1.0 = On time and actively listening.

These six scores will be combined to form of your class participation score. Participation scores may occasionally be adjusted up or down at the discretion of the instructor, if exceptional circumstances warrant such an adjustment.



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# SCHEDULE

Week by week class schedule.

| Class | Date   | Торіс                                                                                                   | Readings                                                                                                   | Assignments Due                                                                 |
|-------|--------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1     | Oct 30 | Introduction to operations,<br>logistics, and supply chain<br>management.                               | The Global Supply Chain                                                                                    | Q1 due at 8am                                                                   |
| 2     | Nov 1  | Processes I: Process view,<br>basic process types, product<br>process matrix, Little's Law              | <ul> <li>Types of Processes</li> <li>Little's Law post</li> <li>Interview with Michael<br/>Dell</li> </ul> | Think about Dell<br>discussion questions<br>Q2 due at 8am                       |
| 3     | Nov 6  | Processes II: Variability and inventory; process improvement.                                           |                                                                                                            | Q3 due at 8am                                                                   |
| 4     | Nov 8  | Inventory I: EOQ                                                                                        | TSMC case                                                                                                  | TSMC group case memo<br>due at 8am<br><i>HW1 due Nov 11 at 11pm</i>             |
| 5     | Nov 13 | Decision Trees I: Decision<br>making and risk, probability<br>and expected value, and<br>decision trees | Decision Tree note     TRIAS                                                                               | Prepare TRIAS<br>discussion questions.<br>Q4 due at 8am                         |
| 6     | Nov 15 | Optimization I: Linear<br>Programming                                                                   | Leslie Presley Bookcase<br>Company (Parts I and II)                                                        | Prepare Leslie Presley<br>discussion questions<br><i>HW2 due Nov 18 at 11pm</i> |
| 7     | Nov 20 | Decision Trees II: Value of<br>information — Bayes'<br>Theorem, expected value of<br>sample information | Bayes' links on Connect                                                                                    | Q5 due at 8am                                                                   |
| 8     | Nov 22 | Inventory II: Newsvendor                                                                                |                                                                                                            | Q6 due at 8am                                                                   |
| 9     | Nov 27 | Simulation I: Monte Carlo<br>simulation; discrete event<br>simulation.                                  | • Simulation links <i>(incl. 10min. video)</i> on Connect.                                                 | Q7 due at 8am                                                                   |
| 10    | Nov 29 | Optimization II: Shadow prices, sensitivity analysis                                                    | • Red Brand Canners (we'll build the model in class)                                                       | Prepare Red Brand<br>Canners discussion<br>questions                            |
|       |        |                                                                                                         |                                                                                                            | Q8 due at 8am                                                                   |
|       |        |                                                                                                         |                                                                                                            | HW3 due Dec 1 at 11pm                                                           |



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# **COURSE AND INSTITUTIONAL POLICIES**

**Attendance:** As per RHL policy on Professionalism, Attendance and Behaviour, students are expected to attend 100% of their scheduled classes. Students missing more than 20% of scheduled classes for reasons other than illness will be withdrawn from the course. Withdrawals, depending on timing, could result in a "W" or an "F" standing on a student's transcript. Students must notify their instructors at the earliest opportunity if they are expected to miss a class due to illness. A medical note from a licensed, local doctor is required if more than 20% of scheduled classes for a course are missed due to illness. Students are required to notify the Student Experience Manager if they are absent from two or more classes due to illness.

**Tardiness:** As per RHL policy on Professionalism, Attendance and Behaviour, students are expected to arrive for classes and activities on time and fully prepared. Late arrivals may be refused entry at the discretion of the instructor or activity lead. Students arriving halfway through a scheduled class, or later, will be treated as absent for that class.

**Electronic Devices:** As per RHL policy on Professionalism, Attendance and Behaviour, laptops and other electronic devices (cellphones, tablets, personal technology, etc.) are not permitted in class unless required by the instructor for specific in-class activities or exercises. Cellphones and other personal electronic devices must be turned off during class and placed away from the desktop. Students who fail to abide by the RHL "lids down" policy will be asked to leave the room for the remainder of the class. Research has shown that multi-tasking on laptops in class has negative implications for the learning environment, including reducing student academic performance and the performance of those sitting around them.

## **ACADEMIC INTEGRITY**

All UBC students are expected to behave as honest and responsible members of an academic community. Failure to follow appropriate policies, principles, rules and guidelines with respect to academic honesty at UBC may result in disciplinary action.

It is the student's responsibility to review and uphold applicable standards of academic honesty. Instances of academic misconduct, such as cheating, plagiarism, resubmitting the same assignment, impersonating a candidate, or falsifying documents, will be strongly dealt with according to UBC's procedures for Academic Misconduct. In addition to UBC's Academic Misconduct procedures, students are responsible for reviewing and abiding by RHL's policy on Academic Integrity.

# STANDARD REFERENCE STYLE

The Robert H. Lee Graduate School uses American Psychological Association (APA) reference style as a standard. Please use this style to cite sources in your work unless directed to use a different style.

## LATE ASSIGNMENTS

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