



ISOM2700 Operations Management Fall 2026 (L4, L5, and L6)

Department of Information Systems, Business Statistics and
Operations Management

COURSE:

ISOM2700 Operations Management (3-0-0:3)
Production and service operations viewed from the strategic, tactical and operational levels: capacity planning, process selection, impact of technology, location and layout, material and resource requirements, scheduling and quality control. Exclusion: ISOM2720 and IELM4100

Fall 2026

L4: Mon & Wed 9:00 – 10:20AM, Room 2465

L6: Mon & Wed 10:30 – 11:50AM, Room 2465

L5: Mon & Wed 12:00 – 13:20PM, Room 2465

Location: Room 2465, LSKBB, Ground Floor

INSTRUCTOR:

Prof. Yiwen Shen (yiwenshen@ust.hk)

Office: LSK-4067; Phone: 2358-7581

Office hours: Tues 5PM to 6PM or by appointment, LSK-4067 and
Zoom

TEACHING

Stacy Deng (imsdeng@ust.hk)

Office: LSK-4065; Phone: 2358-8746

Office hours: By appointment

TEXTS:

Learning materials available on Canvas.

Recommended textbook (optional): Matching Supply with Demand by
Cachon and Terwiesch

GRADING POLICY:

Final course grade will be determined by the following criteria and
maximum point distribution:

Participation (5 out of 7)	5
Online quizzes (best 4 of 5)	20
Midterm exam	35
Final exam	40
Total	100

Participation:

- Total seven attendances will be recorded via **mentimeter**. Each attendance will be given one point. You are allowed to miss two of them for personal reasons (not recommended).

Quizzes: Start from Week 3.

- Each online quiz consists of 12 multiple choice questions.
- Once you start the quiz, the timer will start automatically, and you must complete it within the time limit (one hour).
- The quiz for the week will be released on **Monday morning**. You

must complete the quiz by the due time (**23:59 on Sunday**) each week, as noted in the syllabus.

- NO makeup quiz will be given, and the due time will be strictly followed.

Exam: The midterm covers only part A of the course while the final exam covers only part B. Both exams consist of 45 multiple choice questions and last for two hours. No makeup will be given.

If you miss the midterm exam for a valid reason that is approved by the instructor in advance, you will have to take a 3-hour, 75-question comprehensive final exam instead.

You can bring a A4-sized, double-paged cheatsheet to the exam, which will be collected by proctors at the end of exam.

Regrading policy: Regrading request must be submitted within three days after the post of grade. The regrading will be based on the entirety of the quiz/exam. Paper checking sessions will be organized after exam.

**COURSE GRADE
DISTRIBUTION:**

In determining the final course grade, your instructor will combine the three sessions and consider the recommended grade distribution at HKUST.

**INTENDED
LEARNING
OUTCOMES:**

This course is designed in such a way that, after completing it, you will be able to:

1. Describe the design and delivery of product/service in different organizations, and evaluate the systems for measurement and improvement of operations. [1,4]
2. Identify and select crucial variables and measurements in decision modeling. [1]
3. Identify and describe operations management as one of the core business functions. [3]
4. Integrate operations management with other business functions to support a coherent corporate strategy. [3]
5. Determine how operation management decisions impact other business functions. [3]
6. Identify a wide range of contemporary and pervasive global business issues, as well as cultural and technological advancement that impact the management of operations. [4, 6]
7. Apply a range of appropriate quantitative and qualitative methods and tools to solve business problems in which the management of operations is a critical issue. [4,7]
8. Discuss the role of operations management in sustainability and social responsibility. [8]

The numbers at the end of each learning goal correspond to those learning goals and objectives for the BBA-OM Program. For details, please visit our department web site at <http://www.bm.ust.hk/isom/>.

**TEACHING
APPROACH**

The instructor will cover all required contents as well as some optional topics in class. The lecture slides will be distributed before each class via Canvas. Additional reading materials and other learning resources are also posted on Canvas. Students are expected to learn managerialpts from concrete business problems, manage necessary

quantitative skills, and apply the managerial insights in other relevant settings. Students should complete on-line learning tasks on time and are encouraged to ask questions during the instructor-led, face-to-face session or Zoom meeting.

ACADEMIC INTEGRITY

Students at HKUST are expected to observe the Academic Honor Code at all times. Zero tolerance is shown to those who are caught cheating on any form of assessment and a zero mark will be given. Any act of cheating on exam will automatically result in an F grade for this course.

Proposed Timeline of Class

Part A: Managing Business Process Flow	
Week 1 Sep 2 Sep 7	Introduction to OM (Session 1) Process analysis ■ A process view of organization (Session 2) ■ Little's Law and flow analysis (Session 2)
Week 2 Sep 9 Sep 14 Add/Drop: Sep 14	Bottleneck analysis ■ Bottleneck and throughput analysis (Session 3) OM and Finance ■ Inventory turnover analysis, ROIC tree (Session 4) ■ Basic statistics concepts (Session 4)
Week 3 Sep 16 Sep 21	Managing uncertainty in service system ■ Basics of queueing system (Session 5) Managing uncertainty in service system ■ M/M/s queueing systems (Session 6)
Sep 20	Online Quiz 1 Due (11:59pm Sunday): cover Sessions 2, 3, 4
Week 4 Sep 23 Sep 28	Queueing System ■ G/G/s queueing system and simulation method (Session 7) Quality Management ■ Variability in quality (Session 8) ■ Capability analysis (Session 8)
Week 5 Sep 30 Oct 5	Quality Management ■ Conformance analysis (Session 9) ■ Acceptance sampling (Session 9) Forecasting ■ Qualitative and quantitative approaches (Session 10) ■ Time series forecasting models (Session 10)
Oct 4	Online Quiz 2 Due: cover Sessions 5, 6, 7, 8

Week 6 Oct 7 Oct 12	Capacity planning and resource allocation ■ Linear programming technique (Session 11) ■ Linear programming techniques (Session 12)
Week 7 Oct 14	Mid-term review for Part A (Session 13)
Oct 18	Online Quiz 3 Due: cover Sessions 9, 10, 11, 12
Week 7: Mid-term exam, 45 multiple-choice questions (for part A only) Time: TBD, Location: TBD	
Part B: Matching Supply and Demand	
Week 8 Oct 21 Oct 26	Decision under uncertainty ■ Decision tree method and EVPI (Session 14) Inventory management ■ Introduction to inventory management (Session 15) ■ Economic order quantity (EOQ) model (Session 15)
Week 9 Oct 28 Nov 4	Inventory management ■ Newsvendor model and applications (Sessions 16, 17) (No Class on Nov 2)
Week 10 Nov 9 Nov 11	Revenue Management ■ Capacity-based revenue management (Session 18) ■ Price-based revenue management (Session 19)
Nov 15	Online Quiz 4 Due: cover Sessions 14, 15, 16, 17
Week 11 Nov 16 Nov 18	Supply Chain Management ■ Introduction and win strategies (Session 20) ■ Incentive conflict: risk-sharing strategies (Session 21)
Nov 22	Online Quiz 5 Due: cover Sessions 16, 17, 18, 19
Week 12 Nov 23 Nov 25	■ Pricing in supply chain (Session 22) ■ Intro to Behavioral OM (optional) Final review for Part B (Session 23) (No Class on Nov 30)
Final exam (for part B only, 45 multiple-choice questions, 2 hours, except for those who need to take the 75-question comprehensive exam for 3 hours)	

The instructor may make changes to the above syllabus depending on the progress of class.