



## ISOM4780 Integrated Planning and Execution Spring 2021

Department of Information Systems, Business Statistics &  
Operations Management

### COURSE

This course will use an integrated simulation game as a major learning tool to illustrate how strategic and operational decisions should be made in a competitive business environment. Students will learn to integrate and align key decisions in different business functions to simultaneously achieve a set of defined performance objectives of a company by evaluating decision alternatives and tradeoffs as well as optimizing the resource utilization.

#### Spring 2021

Time: Monday, 3:00-5:50pm

*(Please access via Canvas > Zoom Meeting during the class time for live streaming and recording of class meeting videos)*

### INSTRUCTOR

Prof. Ronald Lau (rlau@ust.hk)

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Office hours: By appointment

### TEACHING ASSISTANT

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### TEXTBOOK

No required textbook; learning materials will be posted on Canvas.

### GRADING POLICY

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

Pre-game planning and analysis (group work)	10
Group competition games and review/analysis*	30
Group case presentation	20
Final exam	<u>40</u>
Total	100

*\* Post game review/analysis (individual work) is required for every member of the team with the worst performance. Further points will be deducted if the review/analysis is deemed to be less satisfactory.*

### LEARNING OBJECTIVES

By the end of the course, students should be able to:

1. Relate the business strategy and execution for a company in a competitive market
2. Monitor and evaluate the business results with proper performance measurement models and metrics, such as AHP, DEA, and SCOR etc.
3. Identify the strategic decisions to achieve higher returns and market dominance
4. Explain a broad spectrum of business concepts and business functions
5. Demonstrate how to run a business profitably through a simulation game
6. Explore and identify the cause and effect relationship between the drivers and business performance

**ACADEMIC INTEGRITY**

Students at HKUST are expected to observe the Academic Honor Code at all times (see <http://www.ust.hk/vpaa/integrity/> for more information). Zero tolerance is shown to those who are caught cheating on any form of assessment and a zero mark will be given. In particular, any act of cheating on exam will automatically result in an F grade for this course.

**COURSE OUTLINE**

<b>Week 1</b> February 1	<b>Competitive strategy</b> <ul style="list-style-type: none"><li>■ Integration of business strategy and functional strategies</li><li>■ Concepts of integrated planning and execution</li></ul> <b>Benchmarking supply chain performance</b> <ul style="list-style-type: none"><li>■ Drivers for supply chain key performance indicators (KPI)</li><li>■ Supply chain operational reference (SCOR) model</li><li>■ Benchmarking supply chain performance</li></ul>
<b>Week 2</b> February 8	<b>Business performance measurement models</b> <ul style="list-style-type: none"><li>■ Selection of performance criteria using analytic hierarchy process (AHP)</li><li>■ Benchmarking performance using data envelopment analysis (DEA)</li></ul> <b>Learning MBS – Level 1 Game</b> <ul style="list-style-type: none"><li>■ Basic modules and analytics</li><li>■ Practice game</li></ul>
<b>Week 3</b> February 15	<b>Public holiday</b>
<b>Week 4</b> February 22	<b>Learning MBS – Level 2 Game</b> <ul style="list-style-type: none"><li>■ Planning and execution on core functions of sales, purchasing, and production</li><li>■ Practice game</li></ul>
<b>Week 5</b> March 1	<b>MBS – Level 3 Game</b> <ul style="list-style-type: none"><li>■ Return on investment of R&amp;D and marketing</li><li>■ Managing multiple retail markets</li><li>■ Team breakout for round 1</li><li>■ Discussion and analysis of results</li><li>■ Submit decisions for round 2</li></ul>
<b>Week 6</b> March 8	<b>MBS – Level 3 Game</b> <ul style="list-style-type: none"><li>■ Group presentation on planning and execution strategy (the two lowest ranked teams in round 2)</li><li>■ Team breakout for round 3 and 4</li><li>■ Discussion and analysis of results</li><li>■ Submit decisions for round 5 and 6</li></ul>

<p><b>Week 7</b> March 15</p>	<p><b>MBS – Level 3 Game</b></p> <ul style="list-style-type: none"> <li>■ Group presentation on planning and execution strategy (the two teams showing the most improvement in round 6)</li> <li>■ Team breakout for round 7 and 8</li> <li>■ Discussion and analysis of results</li> <li>■ Submit decisions for round 9 and 10</li> </ul>
<p><b>Week 8</b> March 22</p>	<p><b>MBS – Level 3 Game</b></p> <ul style="list-style-type: none"> <li>■ Group presentation on planning and execution strategy (the two highest ranked teams in round 10)</li> <li>■ Team breakout for round 11 and 12</li> <li>■ Discussion and analysis of results</li> </ul>
<p><b>Week 9</b> March 29</p>	<p><b>MBS – Level 4 Game</b></p> <ul style="list-style-type: none"> <li>■ Additional information on financial leverage</li> <li>■ Team breakout for round 1</li> <li>■ Discussion and analysis of results</li> <li>■ Submit decisions for round 2</li> </ul>
<p><b>Week 10</b> April 12</p>	<p><b>MBS – Level 4 Game</b></p> <ul style="list-style-type: none"> <li>■ Group presentation on planning and execution strategy (the two lowest ranked teams in round 2)</li> <li>■ Team breakout for round 3 and 4</li> <li>■ Discussion and analysis of results</li> <li>■ Submit decisions for round 5 and 6</li> </ul>
<p><b>Week 11</b> April 19</p>	<p><b>MBS – Level 4 Game</b></p> <ul style="list-style-type: none"> <li>■ Group presentation on planning and execution strategy (the two teams showing the most improvement in round 6)</li> <li>■ Team breakout for round 7 and 8</li> <li>■ Discussion and analysis of results</li> <li>■ Submit decisions for round 9 and 10</li> </ul>
<p><b>Week 12</b> April 26</p>	<p><b>MBS – Level 4 Game</b></p> <ul style="list-style-type: none"> <li>■ Group presentation on planning and execution strategy (the two highest ranked teams in round 10)</li> <li>■ Team breakout for round 11 and 12</li> <li>■ Discussion and analysis of results</li> </ul>
<p><b>Week 13</b> May 3</p>	<p><b>Reflections on the planning and execution strategy</b></p> <p><b>Case Presentation</b></p> <ul style="list-style-type: none"> <li>■ Cathay Pacific: Implementing a turnaround plan</li> <li>■ Huawei: Formulating a new global competitive strategy</li> <li>■ Wal-Mart: Digital transformation strategy</li> <li>■ Li &amp; Fung: How to make a trading business relevant?</li> <li>■ SF Express: An operational model to support rapid growth of business</li> <li>■ Your choice of company, subject to instructor's approval</li> </ul>