



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.

Group game planning and review/analysis*	10
Group competition games	30
Group case presentation	20
Participation and peer evaluation	10
Final exam	<u>30</u>
Total	100

* Each group will have a chance to present their game planning and review/analysis (for about 10-15 minutes) as assigned by the instructor. If any group is selected to make more than one presentation, the better score will be used for final course grade computation.

A post game review/analysis (individual work in the format of a one-page report) is required for every member of the group with the overall worst performance of competition games M3A and M4A for no credit. The purpose of this extra work is to help diagnose the planning and execution problems from one's own understanding and perspective. Further points will be deducted from individual group member 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/vpao/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

<p>Week 1 February 1</p>	<p>Competitive strategy</p> <ul style="list-style-type: none"> ■ Integration of business strategy and functional strategies ■ Concepts of integrated planning and execution <p>Benchmarking supply chain performance</p> <ul style="list-style-type: none"> ■ Drivers for supply chain key performance indicators (KPI) ■ Supply chain operational reference (SCOR) model ■ Benchmarking supply chain performance
<p>Week 2 February 8</p>	<p>Business performance measurement models</p> <ul style="list-style-type: none"> ■ Selection of performance criteria using analytic hierarchy process (AHP) ■ Benchmarking performance using data envelopment analysis (DEA) <p>Learning MBS – Model 1 Game</p> <ul style="list-style-type: none"> ■ Basic modules and analytics ■ Practice game
<p>Week 3 February 15</p>	<p>Public holiday</p>
<p>Week 4 February 22</p>	<p>Learning MBS – Model 2 Game</p> <ul style="list-style-type: none"> ■ Planning and execution on core functions of sales, purchasing, and production ■ Practice game
<p>Week 5 March 1</p>	<p>MBS – Model 3 Game (M3A)</p> <ul style="list-style-type: none"> ■ Return on investment of R&D and marketing ■ Managing multiple retail markets ■ Group breakout session for practice game ■ Discussion and analysis of results ■ Submit decisions for competition game M3A: Round 1 (M) and 2 (W)
<p>Week 6 March 8</p>	<p>MBS – Model 3 Game (M3A)</p> <ul style="list-style-type: none"> ■ Group presentation on planning and execution strategy (the two lowest ranked teams in competition game M3A: Round 2) ■ Group breakout session for competition game M3A: Round 3 and 4 ■ Discussion and analysis of results ■ Submit decisions for competition game M3B: Round 1 (M) and 2 (W)

<p>Week 7 March 15</p>	<p>MBS – Model 3 Game (M3B)</p> <ul style="list-style-type: none"> ■ Group presentation on planning and execution strategy (selected team(s) based on performance) ■ Group breakout session for competition game M3B: Round 3 and 4 ■ Discussion and analysis of results ■ Submit decisions for competition game M3B: Round 5 (M) and 6 (W)
<p>Week 8 March 22</p>	<p>MBS – Model 3 Game (M3B)</p> <ul style="list-style-type: none"> ■ Group presentation on planning and execution strategy (the two highest ranked teams in competition game M3B: Round 6) ■ Group breakout session for competition game M3B: Round 7 and 8 ■ Discussion and analysis of results
<p>Week 9 March 29</p>	<p>MBS – Model 4 Game (M4A)</p> <ul style="list-style-type: none"> ■ Additional information on financial leverage ■ Group breakout session for practice game ■ Discussion and analysis of results ■ Submit decisions for competition game M4A: Round 1 (M) and 2 (W)
<p>Week 10 April 12</p>	<p>MBS – Model 4 Game (M4A)</p> <ul style="list-style-type: none"> ■ Group presentation on planning and execution strategy (the two lowest ranked teams in competition game M4A: Round 2) ■ Group breakout session for competition game M4A: Round 3 and 4 ■ Discussion and analysis of results ■ Submit decisions for competition game M4B: Round 1 (M) and 2 (W)
<p>Week 11 April 19</p>	<p>MBS – Model 4 Game (M4B)</p> <ul style="list-style-type: none"> ■ Group presentation on planning and execution strategy (selected team(s) based on performance) ■ Group breakout session for competition game M4B: Round 3 and 4 ■ Discussion and analysis of results ■ Submit decisions for competition game M4B: Round 5 (M) and 6 (W)
<p>Week 12 April 26</p>	<p>MBS – Model 4 Game (M4B)</p> <ul style="list-style-type: none"> ■ Group presentation on planning and execution strategy (the two highest ranked teams in competition game M4B: Round 6) ■ Group breakout session for competition game M4B: Round 7 and 8 ■ Discussion and analysis of results
<p>Week 13 May 3</p>	<p>Reflections on Business Planning and Execution Strategy</p> <p>Case Presentation</p> <ul style="list-style-type: none"> ■ Cathay Pacific: Implementing a turnaround plan ■ Huawei: Formulating a new global competitive strategy ■ Wal-Mart: Digital transformation strategy ■ Li & Fung: How to make a trading business relevant? ■ SF Express: An operational model to support rapid growth of business ■ Your choice of company and their significant strategic issues, subject to instructor’s approval