Kuwait University
College of Business Administration
Information Systems & Operations Management Department

Course Syllabus

Dr. Fahad Almutairi

ISOM 425 – Simulation of Supply Chain Processes – Fall 2024-2025

Section 01A	Sun / Tue / Thu 12:00 PM – 12:50 PM Room C2-1003
Email	fahad.almutairi@ku.edu.kw
Office	2nd Floor, ISOM Department, Office # S 02 0A 1026
Office Hours	Sun / Tue 11:00 AM – 12:00 PM

Textbook	Many resources will be used for this course including but not limited to "Applied Simulation Modeling" by Andrew Seila, Vlatko Ceric, Pandu Tadikamalla
Online Components	Moodle + Microsoft Teams

COURSE DESCRIPTION:

This course is designed to teach students the processes, tools, and techniques for performing effective operations and supply chain simulation analyses. In particular, the course starts with a brief review of probability and statistics, queuing theory, discrete event simulation, and statistical aspects of simulation. Also, the course focuses on the basic underlying principles of how simulations work, how to collect and analyze input data, how to build basic simulation models using specific simulation software, how to verify and validate simulation models, and how to interpret (and perform statistical analyses of) simulation output.

COURSE LEARNING OBJECTIVES (CLOS):

Students who successfully complete this course are expected to be able to:

CLO1. Explain the importance of the use of simulation in the analysis of business systems.
CLO2. Identify the different types of simulation.
CLO3. Use spreadsheet static simulation to analyze related business problems.
CLO4. Use a discrete event simulation software.

CLO MAPPING TO CBA SKILL BASED COMPETENCY GOALS[1]

CLO	Competency Goal				
	Analytical	Communication	Information Technology	Business Ethics	General Business Knowledge
1	I				I
2	I				I
3	I	I	R		
4	I	I	R		

Note: 'I' indicates Introduce and 'R' indicates Reinforce

GRADING AND COURSE REQUIREMENTS

All dates (EXCEPT for the final) may change due to class circumstances and holidays. Always check online for the latest version of the syllabus

Weight	Category
30%	**Attendance and Lab Work**
30%	**In-Class Tests**
40%	**Final Exam**
100%	

Grade Distribution

Grade	Range
A	≥ 95
A-	≥ 90 and < 95
B+	≥ 87 and < 90
B	≥ 83 and < 87
B-	≥ 80 and < 83
C+	≥ 77 and < 80

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[1] CBA Competency Goals can be found at the end of this document

C	≥ 73 and < 77
C-	≥ 70 and < 73
D+	≥ 65 and < 70
D	≥ 60 and < 65
F	< 60

ATTENDANCE

Attendance in this class is required. It is your responsibility to seek out help from classmates to fill you in on missed materials.

In addition to my classroom policies, you are also expected to abide by the policies of the University. Every student in this course must abide by the Kuwait University Policy on Attendance (published in the student bylaws). A copy of the student bylaws can be accessed online on:

http://vpaa.ku.edu.kw/ar/documents/KU%20ByLaws/Students/Curriculum_Regulations.pdf

ACADEMIC INTEGRITY

The University's code of academic integrity is designed to ensure that the principles of academic honesty and integrity are upheld. All students are expected to adhere to this Code. All acts of academic dishonesty will be dealt with in accordance with the provisions of this code. Every student in this course must abide by the Kuwait University Policy on Cheating and Plagiarism (published in the student bylaws). A copy of the student bylaws can be accessed online on:
http://vpaa.ku.edu.kw/ar/documents/KU%20ByLaws/Students/Curriculum_Regulations.pdf

Special Needs: If you have a disability and/or special needs, you should bring this to my attention as soon as possible, but not later than the second week of class.

CBA COMPETENCY GOALS

1. <u>Analytical Competency</u>: A CBA graduate will be able to use analytical skills to solve business problems and make a well-supported business decision.

Student Learning Objectives:

1.1. Use appropriate analytical techniques to solve a given business problem.

1.2. Critically evaluate multiple solutions to a business problem.

1.3. Make well-supported business decisions.

2. <u>Communication Competency</u>: A CBA graduate will be able to communicate effectively in a wide variety of business settings.

Student Learning Objectives:

2.1. Deliver clear, concise, and audience-centered presentations.

2.2. Write clear, concise, and audience-centered business documents.

3. <u>Information Technology Competency</u>: A CBA graduate will be able to utilize Information Technology for the completion of business tasks.

Student Learning Objectives:

3.1. Use data-processing tools to analyze or solve business problems.

4. <u>Ethical Competency</u>: A CBA graduate will be able to recognize ethical issues present in business environment, analyze the tradeoffs between different ethical perspectives, and make a well-supported ethical decision.

Student Learning Objectives:

4.1. Identify the ethical dimensions of a business decision.

4.2. Recognize and analyze the tradeoffs created by application of competing ethical perspectives.

4.3. Formulate and defend a well-supported recommendation for the resolution of an ethical issue.

5. <u>General Business Knowledge</u>: A CBA graduate will be able to demonstrate a basic understanding of the main business disciplines' concepts and theories.

Student Learning Objectives:

5.1. Acquire a fundamental understanding of knowledge from the main business disciplines (e.g. finance, accounting, marketing, and management information systems, among others).