



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



Course Syllabus

Dr. Ahmad M. Ashkanani

ISOM 410 – Quality and Production Management – Fall 2021

Section 01A	Mon / Wed 02:00 PM – 03:15 PM Room 02-D2-1005
Email	a.ashkanani@ku.edu.kw
Office	2nd Floor, ISOM Department, Room # 02-0A-1016
Office Hours	By appointment
Required Material	Reid, R. D., & Sanders, N. R. (2013). Operations Management: An Integrated Approach . John Wiley & Sons. Case study course packet (TBA)
Additional (Optional) Material	Cachon, G., & Terwiesch, C. (2020). Operations Management . McGraw-Hill Education. Montgomery, D. C. (2020). Introduction to Statistical Quality Control . John Wiley & Sons. Womack, J. P., & Jones, D. T. (2003). Lean Thinking: Banish Waste and Create Wealth in Your Corporation . Free Press.
Online Components	Moodle + Microsoft Teams

COURSE DESCRIPTION:

Quality management aims to ensure the consistency of the organization's operations and products, either goods or services. This course provides an in-depth walkthrough of a quality improvement cycle. The aim of this course is to provide students with the skills and knowledge required to lead a successful quality improvement project. This is an Operations and Supply Chain Management (OSCM) major class required for all OSCM major students at the College of Business Administration.

COURSE LEARNING OUTCOMES:

The learning outcomes for this course, listed below, relate to the learning goals of the College of Business Administration Undergraduate Program, which can be found in the appendix at the end of this syllabus. The numbers in parenthesis indicate to which specific learning goal the outcome relates.

Upon successful completion of the course, students will be able to:

- a) Define quality management and explain why it is important to an organization.
- b) Recognize the ethical implications of quality.
- c) Describe various quality management frameworks and philosophies (i.e., TQM, lean management, TPS, JIT, SPC, Six Sigma) and show how to use them to improve firm's productivity and performance.
- d) Use statistical process control (SPC) techniques and computer tools to monitor and analyze a process.
- e) Describe and Implement a quality improvement project.
- f) Analyze case studies to make quality management-related data driven decisions and conclusion, write case study reports, and participate in case study discussions.

COURSE OUTLINE

Topic	Key Topics	
Introduction and Total Quality Management	<ul style="list-style-type: none"> • Defining Quality • Cost of Quality • Total Quality Management • Quality Awards and Standards 	
Statistical Process Control (SPC) and Six Sigma	<ul style="list-style-type: none"> • Sources of Variation • The Statistical Process Control Framework <ul style="list-style-type: none"> ○ Capability Analysis ○ Conformance Analysis <ul style="list-style-type: none"> ▪ Control Charts ○ Investigating for Assignable Cause <ul style="list-style-type: none"> ▪ Cause-and-Effect Diagram ▪ Five Whys ▪ Pareto Analysis ○ Eliminating Assignable Cause • Control Charts • Six Sigma and the DMAIC Process 	
Lean Operations, Toyota Production System (TPS), and Just-in-Time (JIT)	<ul style="list-style-type: none"> • What is Lean Operations? • Lean Principles <ul style="list-style-type: none"> ○ Value ○ Value Stream ○ Flow ○ Pull ○ Perfection • Muda and Work Content • Seven Sources of Waste • The Architecture of the Toyota Production System (TPS) • Just-in-Time (JIT) Production 	
Additional Quality Tools and Statistical Models	<ul style="list-style-type: none"> • Additional Quality Tools and Statistical Models 	

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	Description
20%	Quizzes	Number of quizzes will be announced later.
15%	Assignments	Number of assignments will be announced later.
25%	Case Studies	Number of case studies will be announced later.
40%	Final Exam	Date/Time: Mon. 31/01/2022 from 5 PM to 7 PM
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
C	≥ 73 and < 77
C-	≥ 70 and < 73
D+	≥ 65 and < 70
D	≥ 60 and < 65
F	< 60

Important Dates

Date	Event
Thu. 20/01/2022	Last Day of Classes
Mon. 31/01/2022	Final Exam

QUIZZES

Quizzes will be given at the beginning of class and/or may include oral examination components (to be conducted at a later time if needed). The study material for each quiz will include what we covered in-class after the prior quiz and before the current quiz. Quiz questions are a good reflection of what the final exam questions will look like. The total quizzes grade is worth 20% of your final grade. The quiz dates will be announced later.

ASSIGNMENTS

The assignments will help you develop your analytical and decision-making skills. The total assignments grade is worth 15% of your final grade. The assignment dates will be announced later.

CASE STUDIES

The case studies can be purchased from the course packet (more info will be shared with you later). The case study assignments are divided into two components: (1) team case writeups and (2) individual case discussion. For the case writeups component, you are asked to work with your teammates to answer the assigned case study questions. Your teammates will rate your participation in each case writeup using a peer evaluation form. For the individual case discussion, we will conduct an in-class discussion of the case study and I will evaluate your individual participation in the case discussion based on the quality (rather than quantity) of the comments you make. The total case study assignments grade is worth 25% of your final grade.

FINAL EXAM

There is a comprehensive final exam (worth 40% of final grade) in this course. The final exam may include a project component. If so, then I will provide you with the details later. The exam rules are as follows:

Identification: You must bring and display a valid Kuwait University student ID to the examinations.

Late Arrival: If you arrive late for an examination, you will be given the remaining amount of time to complete your examination. However, after the first student hands in her/his examination, late students cannot start the examination. These late students will receive a FA grade in the course.

Questions during the examination: You are not allowed to ask questions about the exam content during the examination, unless you feel that there is a typographical error. Reading

and understanding what the question is asking is part of the exam. If you need to make any assumptions, then make sure to clearly write those assumptions in your response.

Other: Working on your examination after time has expired is not allowed – this includes filling in answers on the answer sheet.

COVID-19 note: these rules might change if it is determined that we cannot conduct the exam on campus.

ATTENDANCE

Attendance in this class is required. While there is no specific grade given for attendance, absences and late attendance will negatively affect your in-class experience. It is your responsibility to seek out help from classmates to fill you in on missed materials. For online sessions, you are expected to attend the live meetings that we will have on MS Teams. Failing to do so will lead to counting you as absent for a given class session.

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 Guide). A copy of the student guide 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 Guide). A copy of the student guide can be accessed online on:

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

In particular,

- You should neither give nor receive assistance from anyone in taking the quizzes, assignments, and final exam.
- You should immediately report to me any act of academic dishonesty that you may observe. Your anonymity will be protected.

Cheating includes (but not limited to):

- Using unauthorized notes during the examination.
- Using unauthorized devices during the examination

- Communicating with anyone besides instructor or exam proctor.
- Looking at another student's work during the examination.
- Copying another student's work.
- Having someone else take the exam on your behalf.

OTHER COURSE POLICIES

Your fellow-students and I need 100% of your attention and mindshare while the class is in session. Toward this end:

- For each class meeting, please arrive sufficiently ahead of the official start time in order to collect any handouts or prior quizzes that have been graded and get yourself ready with your notes and papers.
- Please do not walk around, or out of, the classroom, while class is in session.
- All electronic gadgets must be turned off (not turned to vibrate, but actually turned off!) while class is in session. For the purpose of this bullet, if your gadget has an on/off switch, it is an electronic gadget. This note does not apply to online sessions.

Note: Please DON'T send anyone (a family member or any other person) to talk to me about giving you a higher grade. Any student who violates this rule will not receive class bonuses (if any).

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.

COMMON EXCUSES THAT ARE NOT ACCEPTABLE

"My scores do not reflect the enormous effort I am putting into this course."

"I really understand the material, but my scores don't reflect it."

"I spent hours studying for this test, but I just blanked out during the test."

"I am not good at math problems."

"I am not good."

CBA COMPETENCY GOALS

1. Analytical Competency: 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. Communication Competency: 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. Information Technology Competency: 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. Ethical Competency: 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. General Business Knowledge: 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).