BUS325B: OPERATIONS MANAGEMENT

Fall, 2024

Course Introduction

Course Title	Operations Management
Course Code	BUS325B
Credit Hours	3
Semester & Year	Fall, 2024
Pre-requisites	

Class Type	Section	Days	Time	Room
Lecture / In-Class	BBA-2	Mon / Wed	10:30-12:00 Hrs	806

Instructor

Instructor	Shijith Kumar
Office	1112 (11th Floor)
Consultation Hours	Thu / Fri (14:00 – 16:00 hours) or appointment by email
Email	shijith.pm@solbridge.ac.kr

Mission Map

Mission Based Goals 	Approximate % of Course Content
Global Perspective	20%
Asian Expertise	15%
Creative Business & Technology Foundations	50%
Cross Cultural Competence	5%
Social Responsibility	10%
Total	100%

Welcome to the study of Operations Management. This Course Plan is intended to provide you with the objectives of this course, the pedagogy (teaching and learning methodology), the session-wise plan, references, reading materials used, the instructor's expectations from the students taking this course, the examinations taken, and the evaluation system. This course outline also provides the plan for preparing for each class session of this course.

Please use this plan to keep up studying and learning this course right from the start!

SolBridge Mission & Course Objectives

The prime goal of the course is to deliver the promise of SolBridge. SolBridge has the mission of educating the next generation of Asian Thought leaders. The school aims to instill in our graduates a Global Perspective, Asian Expertise, a solid foundation in Management Knowledge, Cross Cultural Competence and a sense of social responsibility.

In today's globalized world, the highly competitive market is pressurizing every organization to get into a frantic race to find new ways to create and deliver value to customers. Corporate success in the new world economy demands a fresh look at strategies, and specifically operations strategy. Dr. Michael Hammer once said, "Southwest turns its planes around twice as fast as competitors, getting more flights out of expensive aircraft and pilots. Wal-Mart invented loading-dock processes to quash expensive inventory. Dell runs their entire company with three days of inventory, you pay up front, and they stiff their suppliers,..... **Operations is where these industries are won and lost**." *Operations can thus be the source of fresh thoughts to the foundations of competitive success.*

Thus, understanding Operations Management becomes an imperative for managers to succeed in their professional endeavors. This course aims to cover high level Operations Management concepts.

The objectives of this course are:

- To develop an understanding of strategic and tactical Operations Management issues through a process-centric approach.
- To develop basic competence and skills needed to design/operate/improve organizational processes balancing demand and supply.

Learning Outcomes

Following successful completion of the course, participants would have a better understanding of organizational processes aiming to balance demand and supply from both strategic and tactical perspectives. Specifically, the participant would be able to:

- Define operations strategy and understand its links with the business strategy.
- Understand major process structures and strategic fit.
- Solve project management network planning problems.

- Sketch business processes and solve operational issues in processes.
- Analyze system/process design and capacity management issues.
- Improve business operations processes.
- Understand principles and best practices of quality management.
- Apply inventory management models.
- Understand the role of digital technology in operations and supply chain management.
- Discuss environmental and social sustainability issues in managing operations and supply chains.

Course Outcome – SolBridge Mission Matrix[1]

Course outcomes	Learning level	Course Outcome Statement	SolBridge Mission Goals					Assessments
			Global Perspective	Asian Expertise	Creative Business & Technology Foundations	Cross Cultural Competence	Social Responsibility	
CO 1	L2 (Understand)	Define operations strategy and understand its alignment with global business strategy	2	2	2	1	1	Assignment Quiz Exam
CO 2	L2 (Understand)	Understand major process structures and strategic fit	0	0	3	0	0	Simulation Assignment Quiz Exam
CO 3	L3 (Apply)	Solve project management network planning problems	0	0	2	0	0	Assignment Exam
CO 4	L3	Sketch business processes and solve						Case Analysis

[1] *Key: 3 - Imparts Knowledge/Skills, Provides Practice, and Provides Reflection/Experimentation opportunities; 2 – Imparts Knowledge/Skills, and Provides Practice; 1 – Imparts Knowledge/Skills; 0- Does not address*

	(Apply)	operational issues in process	1	0	3	0	0	Assignment Quiz/Exam
CO 5	L4 (Analyze)	Analyze system/process design and capacity management issues	1	0	3	0	0	Case Analysis Simulation Quiz / Exam
CO 6	L5 (Evaluate)	Improve business operations processes	2	2	3	1	1	Case Analysis Activity/Game Exam
CO 7	L3 (Apply)	Apply principles and best practices of quality management	1	1	2	1	1	Quiz / Exam
CO 8	L3 (Apply)	Apply inventory management models	1	1	2	0	0	Assignment Exam
CO 9	L2 (Understand)	Understand the role of digital technology in operations and supply chain management	1	0	2	0	1	Quiz / Exam
CO 10	L2 (Understand)	Discuss environmental and social sustainability issues in managing operations and supply chains.	1	0	1	0	1	Quiz / Exam

Teaching Methodology

I would appreciate the class sessions to be discussion sessions, not necessarily lectures. A class session will typically consist of exposition of principles & concept, case discussion, classroom workout, activities, discussion of problems, and invited case presentations. It is expected that each participant would have read the assigned material before she/he comes to class for the given day. Meaningful class participation is an important part of the participant's grade. Operations Management needs thorough understanding of concepts and application of those concepts into problems to arrive at meaningful solutions. So, problem solving is an integral part of the course. Participants are expected to - be prepared with the readings and come prepared for case / problem discussions. This needs to be practiced with high levels of integrity to make the maximum use of the contact hours.

An important way to learn is through teamwork. Students are advised to work in groups. First try the problems on one's own, then, discuss the solutions with study group members. Such assignments reinforce learning and promote preparedness.

Course Materials and Readings

I would strongly recommend you use the following book during the course:

- Operations & Supply Chain Management; Chase, Jacobs Tata McGraw Hill, (15th Edition, or later). I have found this book to be quite comprehensive and lucid, and thus useful.

It is highly recommended that students aspiring to play a role in the business / corporate world read the business novel – ***The Goal*** **(Revised 3rd & 20th anniversary edition) by** ***Dr. Eliyahu Goldratt***. It would be a scintillating experience!

Course participants will be provided with a set of cases / additional readings which will be extensively discussed as per plans laid out in the detailed session plan.

Assessment Method

These are the components of the evaluation scheme for this course:

Component	Weight
Attendance	20%
Assignments	20%
Case Analysis	10%
In-class activities	5%
Quiz	10%
Mid-course exam	15%
Final exam	20%
Total	**100%**

Attendance and Class participation
It is compulsory to attend all classes. Students would be evaluated on their preparedness to the class, contributions to the class discussions by bringing out relevant examples and applications in the class, constructive contributions to case / problem discussion and analysis, and answering questions during class discussions. It is important to maintain an environment conducive to learning in the classroom and so it is important to respect all classmates and inculcate a healthy cohesive approach to learning. You are encouraged to think from multiple perspectives and viewpoints to enhance the understanding of business scenarios and problems. Having different perspectives and disagreements are welcome, but disrespect for others, disruptions and arrogance is not welcome.

Assignment and Case Analysis
The assignments are primarily focused on problem solving. These would be announced on the LMS and are mostly individual exercises. You will have to analyze cases in the class, and these are mostly group exercises. Details will be announced in the class.

Quiz
These are in-class quizzes, and these could be unannounced. So please keep yourself updated with the session topics as a surprise quiz could just be around the corner!

In-class activities
These are some in-class group exercises including discussions, activities, problem solving, presentation, etc and active participation in these would enable you to score well.

Mid-course and Final exam
Exams would be based on our class discussions aimed at testing your understanding of the concepts we learn through the course and also testing your ability to apply concepts in solving operations management problems.

Note: The award of the final grade will be as per the SolBridge Grading-Curve policy. Further, A+ grades would only be awarded to students with a score of 94 or more out of the total final 100 points.

Session Plan

This is a tentative session plan. We may make adjustments as we progress.

Week #	Session Outcome At the end of session, the student will be able to..	Topic	Pre-class Preparation	Post-Class work	In-Class activities
1&2	Understand the course objectives & expectations	Introduction to OM and Operations Strategy	Go through the course plan	Read the following: Text Book chapters: 1 (LO 1, 3, 4) & 2 (LO 2, 3, 5)	
	Identify major OM processes				Productivity problems
	Understand sustainable and responsible supply chain practices				
	Understand Operations-Strategy Alignment and trade-offs				
	Measure Productivity				
2 & 3	Identify different manufacturing process configurations based on CODP and volume-variety relationships	Manufacturing & Service Processes and Strategic Capacity		Read the following: Text Book chapters: 5 (LO1, 2, 4) & 9 (LO 1, 2) & 7 (LO 1, 2)	PP Matrix & Service-system Design Matrix exercise
	Identify different service process configurations based on customer-server contact				
	Understand the role of technology to manage different supply chain process configurations				
	Recognize strategic importance of capacity				Capacity utilization and BE analysis problems
4 & 5	Map business processes and key elements	Process Mapping and Process Fundamentals		Read the following: Text Book chapter: 11 (LO 1, 2)	Process Mapping Exercise
	Understand processes capacity, CT, throughput, FT, etc				CT, throughput/WIP/FT problems
	Identify technological intervententions in managing and controlling processes			Please go through the statistics tutorial before the start of week 6 just to refresh your basic statistics	
6 & 7	Analyze process yields, constraints and impact of variations	Process Analysis and Constraint Management			Process Analysis Case discussion
					Assembly line game
					Mura-Muri Game
8	MID TERM EXAM				
9 & 10	Manage Processes with constraints and variations	Process Analysis and Constraint Management		Read the following: Text Book chapter: 23 (LO 1, 2, 4)	Assembly line game PQ Problem
11 & 12	Understand project organizations and PM fundamentals	Project Management		Read the following:	CPM/PERT problems
	Define project network				
	Conduct network analysis			Text Book chapter: 4 (LO 1, 2)	
13	Explain scope of TQM and understand Six sigma	Quality Management		Read the following: Text Book chapter: 12 (LO 1, 2) & 13 (LO 1)	Process Capability problems
14	Apply Inventory Management Models	Inventory Management		Read the following: Text Book chapter: 20 (LO 1, 2)	News vendor problems
15	Final Exam				

Academic Integrity

A student fails to act with integrity when they engage in or attempt to engage in any of the following conduct. Failing to act with integrity is a violation of the Code of Conduct.

1. **Academic Integrity**

Academic integrity and honesty are fundamental to the values of our institution. Academic misconduct by students negatively affects both our academic reputation & quality and our students' learning experience & progress (academic and career). Thus, SolBridge pays utmost importance to academic integrity and honesty and expects all the students to maintain academic integrity in all their academic endeavors.

Students must read the SolBridge Academic Integrity guidelines & rules, the Code of Responsible Conduct, and respective course syllabi carefully to understand what the institution and the course instructors expect in terms of academic integrity and responsible conduct. If the students have any doubt about the appropriateness of any act or conduct, they should reach out to the SolBridge academic affairs team or their course instructors.

1. **Academic Dishonesty**

Activities that might interfere with the quality of education, pursuit of knowledge, or fair evaluation of a student's performance qualify to be termed as dishonest academic activities. Examples of academic dishonesty includes but not limited to:

1. **Cheating in exams and other coursework**

Any attempt to use unauthorized materials, study-aids, support or assistance. Examples include but not limited to:

- Copying from another student during examinations or in assignments.
- Allowing another student to copy or collaborate with in exams or assignments when it is not permitted
- Obtaining or using unauthorized information, material, or assistance in quizzes, exams or any academic assignment
- Copying material from other students' reports/ assignments and submitting the same as one's own report
- Creating fictitious interview materials for assignments or reports.
- Failing to follow rules laid out for exams, quizzes, assignments, etc.

2. Plagiarism

SolBridge considers plagiarism as a serious breach of professional ethics. Plagiarism will not be tolerated in any form at SolBridge. Penalties can be as severe as expulsion from the university. To avoid plagiarism, it is always best to do your own work or cite the work of others as appropriate.

3. Copying Textbooks & copyrighted materials

Copying Textbooks and other copyrighted materials without permission of publisher or author is tantamount to theft. Therefore, students are expected to purchase the prescribed books and other materials from the Woosong Bookstore or from other legal sellers. Students violating copyrights will face disciplinary actions. Refer to the disciplinary action section.

4. Fabrication

Submitting deliberately falsified or altered information in any academic exercise. Examples include but not limited to:

- Making up data for field exercises, surveys, experiments, etc.
- Manipulating data while analyzing or using data.
- Artificially generating sources or references.
- Citing nonexistent references.

- Forging signatures.
- Forging attendance records or falsifying attendance records.
- Submitting documents containing false information.

5. Misrepresentation of academic facts and records

Any attempt to misrepresent, falsify, or tamper academic records, documents, and facts. Examples include but not limited to:

- Tampering with student records in any format (digital, paper, etc.).
- Tampering with transcripts, grade sheets, etc.
- Falsifying academic information (related to the enrolled program, grades, etc.) in public forums, CVs, social media, etc.

6. Collusion

Deliberately helping or attempting to help another to engage in dishonest academic activities.

7. Misuse of instructor's course materials

Sharing, copying, posting any course materials (slides, articles, cases, simulations, exams, quizzes, samples, etc.) provided by an instructor without written permission of the instructor.

8. Unauthorized use of another student's work

Obtaining, sharing, posting, editing any other student's work (for example, exams, assignments, quizzes, projects, essays, etc.)

9. Use of Generative AI tools

Using Generative AI tools (such as ChatGPT, Google Bard, GitHub Copilot, AlphaCode, etc.) against the policy laid out by the respective professors in each course. Students are expected to refer to the syllabus for their respective courses to learn about the generative AI policy for the course and are expected to reach out to their course instructors for any clarifications. **Please refer to the AI Usage Policy in the section below.**

Any permitted use of generative AI (for any coursework) needs to be cited by the student in the relevant assignment/report/essay/etc. in the format provided by the course instructor or as follows: *"<Prompt>,* <name of the tool>, <Version of the tool>, <date when the content was generated>)." Failure to do so will attract disciplinary actions.

10. Lying or fraud

Giving false excuses or making false statements. Examples include but not limited to:

- Giving false excuses for not meeting deadlines, or for postponing an exam, etc.
- Marking attendance without attending class sessions.
- Making false statements regarding incomplete assignments, coursework, etc.
- Making false statements or giving false excuses about being late to class or about any inappropriate behavior.

Any act of academic dishonesty (related to any course) will be dealt as per the following disciplinary procedure:

1. The first instance or the act will result in a "zero" for the assignment or the assessment in question, and a report will be filed with the disciplinary committee. If the assessment in question is the final assessment for the course, then the result is a 'C', 'D' or 'F' grade for the course as per the the professor's discretion. Further actions may be taken by the disciplinary committee based on the severity of the behavior.
2. The second instance or the act will result in a 'fail' grade for the entire course, and a report will be filed with the disciplinary committee. Further actions may be taken by the disciplinary committee.

3. The third cumulative instance or act will result in institutional-level disciplinary action which could include suspension or expulsion from the school.
4. The instructor will report each instance of plagiarism, academic dishonesty and violation of school disciplinary rules to the disciplinary officer.

AI Usage Policy: <u>LIMITED USE PERMITTED</u>

For this course, you MUST be the author of the work submitted. You may use Generative AI tools only for specific purposes as allowed and stated here:

- *For self-study*
- *For reviewing the course topics or contents*

Assignment or other assessment specific instructions about the use of Generative AI tools will be provided and you are advised to follow the same.

You are **NOT** supposed to:

- *Use Generative AI tools in quiz or exam.*
- *Directly use content (text, image, code, or any other media form) from Generative AI in any assignments, reports, or other assessment components.*
- *Use Generative AI to analyze data.*

If you have any doubts or questions about what constitutes academic misconduct and/or about the permitted use of AI in this course, please do not hesitate to contact me.

I will welcome continuous feedback from the students about the progress of this course, and about any way in which I can make this course better.

Remember…."**Knowledge without follow-through is worse than no knowledge."**

- Henry Charles Bukowski

All the very best…. and happy learning!