



Course Specifications

Course Title:	Production and Operations Management
Course Code:	BUS582
Program:	Master of Business Administration
Department:	Management
College:	College of Business Administration
Institution:	Prince Sultan University

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A. Course Identification

1. Credit hours: 3
2. Course type
a. University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered: 2nd
4. Pre-requisites for this course (if any): NA
5. Co-requisites for this course (if any): NA

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	39	86.66
2	Blended (Flipped Learning)	3	0.66
3	E-learning	-	
4	Correspondence	-	
5	Other - Guest Speakers	3	6.66

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	45
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	45
Other Learning Hours*		
1	Study	30
2	Assignments	10
3	Library	15
4	Projects/Research Essays/Theses	30
5	Others (specify)	
	Total	85

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

Production and Operations Management is the area that deals with the production of goods and services. It is concerned with managing the process that converts inputs, such as material and labour, into output, such as products and services. Thus, it is an important function in

every company. An effective and efficient operations management can help a company stay competitive. Successful companies practice successful operations management, while a company struggling to make profit can often trace their problems to poor management of their operations. The field of Operations Management has seen many developments and changes over the decades.

This course will focus on product and service design, productivity, capacity planning, process selection, facility layout, and line balancing, quality management theories and paradigms, aggregate planning, and quality control. Through examples, students will learn how they can apply innovative Operational methods to gain a competitive edge.

An effective Operations Management interacts with various functions in a firm, such as Accounting, Marketing, and Information Technology. A well-run establishment requires that these functions are integrated and consistent with the overall strategy of the firm. This means that every manager, irrespective of their department or specialization, will benefit from being familiar with Operations Management. A sound understanding of Operations Management becomes even more important for the professional starting a new business or product line.

2. Course Main Objective

The main objective of this course is to provide students with a broad understanding and knowledge of operations management concepts, methods and tools used in both service-oriented and product-oriented organizations to gain a competitive edge.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	Demonstrate an advanced understanding of important concepts and theories of operations management.	LO 1.1
2	Skills:	
2.1	Identify the appropriate tools and methods for specific situations.	LO 1.1
2.2	Solve problems using appropriate models toward determining solutions that provide the highest payoff and/or that are efficient.	LO 1.1
2.3	Interpret outcomes of analyses and/or calculations in local and global business context and develop solutions demonstrating their leadership skills.	LO 1.1
	Demonstrate effective and persuasive communication skills in presentation	LO 1.1, 2.1, 2.2
2.5	Produce a clear and logical written report embodying theories and concepts of operations management	LO 1.1, 2.1, 2.2
3	Competence:	
3.1	Applies operations management methods and practices in service or manufacturing environments that align with the organization's strategic goals and objectives	LO 1.1, 5.1
3.2	Provide solutions to operational problems based on analysis of qualitative and quantitative data appropriate to the problem	LO 1.1, 3.1

CLOs		Aligned PLOs
3.3	Applies best practices for knowledge-based operations management decision making	LO1.1, 3.1, 5.1

C. Course Content

No	List of Topics	Contact Hours
1	1 - Introduction to operations management	3
2	2 – Product and service design	3
3	3 - Competitiveness, strategy and productivity	6
4	4 - Strategic capacity planning for products and services	6
5	5 - Process selection and Facility Layout	9
6	6 – Management of Quality	3
7	7 -Supply chain management	6
8	The instructor can supplement the above main topics with any two topics from the following: <ul style="list-style-type: none"> • Quality control • Aggregate planning • Forecasting • Inventory Management 	6
Total		42

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Demonstrate understanding of important concepts and theories of operations management	<ul style="list-style-type: none"> • Case analysis • Solving problems in class • Bring in external material (outside the book) to support the understanding 	Major exam, final exam, group project, homework's.

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
		<ul style="list-style-type: none"> • Lectures • Videos • Group discussions • Group projects • Students are advised to look for knowledge on specific topics and submit as homework's. • 	
2.0	Skills		
2.1.	Ability to identify the appropriate tools and methods for specific situations.	<ul style="list-style-type: none"> • Pose questions during lecture for thinking and discussion • Enable students to develop notes-taking skills • Ask students to transfer textual description into graphical representation during lecture • Let students try solve the problems first by themselves after explanation of theory/concepts and with guidance to use relevant solved problems inside the chapter (students are supervised one-to-one coaching until they are able to solve the problems - all inside class) 	Use of mini-case problems in which students must determine which models and quantitative methods to choose, as well as homework's , group projects, major exam, final exam
2.2.	Perform calculations using models toward determining solutions that provide the highest payoff and/or that are efficient.		
2.3.	Interpret outcomes of analyses and/or calculations in local and global business context and develop solutions demonstrating their leadership skills.		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
		<ul style="list-style-type: none"> Problem-solving-instruction and collaborative learning, think-pair-share strategies which include assigned group work in problem-based-learning during class sessions, and group project. 	
2.4	Demonstrate effective and persuasive communication skills in presentation	Group discussions Group projects	Ask a student randomly from various groups to come and present/explain results of calculation or thoughts in response to the problem (part of their class participation discussion) Written and presentation of group projects
2.5	Produce a clear and logical written report		
3.0	Competence		
3.1	Applies operations management methods and practices in service or manufacturing environments that align with the organization's strategic goals and objectives	Problem-solving-instruction and collaborative learning, think-pair-share strategies which include assigned group work in problem-based-learning during class sessions, group projects, and group discussions	Use of mini-case problems in which students must determine which models and quantitative methods to choose, as well as group discussion homework's , group projects, major exam, final exam
3.2	Provide solutions to operational problems based on analysis of qualitative and quantitative data appropriate to the problem		
3.3	Applies best practices for knowledge-based operations management decision making		

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score

1	Major 1 and Major 2	8/13	30-40%
6	Research project and presentation	14/15	10-20%
7	Participation/Attendance	-----	0-5%
8	Comprehensive final exam (All chapters will be included in the final exam)	17	40%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

The Instructors are available for student consultation and academic advice during:

1. Office hours which is 4 hours per week
2. Any time as agreed by Instructors and students
3. Students can set an appointment with the Instructors via PSU email or by moodle

Office hours are announced to students via LMS as well as on the office door. Also, emails and extension numbers are provided as other means for requesting advice.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Stevenson, W., Operations Management, 12th ed. Global edition. New York: McGraw-Hill/Irwin 2015.ISBN 10: 0078024102 / ISBN 13: 9780078024108.
Essential References Materials	<p>Stevenson, W. Operations Management (2020). 14th edition, New York: McGraw-Hill/Irwin ISBN10: 126023889X, ISBN13: 978126023889.</p> <p>F. Robert Jacobs and Richard Chase (2020). Operations and Supply Chain Management.16th Edition. New York: McGraw-Hill. ISBN10: 1260238903 ISBN13: 9781260238907.</p> <p>Heizer, Jay; Render, Barry; Munson, Chuck (2017). Operations Management: Sustainability and Supply Chain Management, 12th ed, England. Pearson Education Limited.</p>
Electronic Materials	Please review articles pertaining to the topics mentioned above. These articles can be downloaded from the renowned operations management journals, such as journals of operations management and international journal of production and operations management.

Other Learning Materials	
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2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom that provides sufficient chairs for large number of students including appropriate for both right-handed and left-handed students Classroom conducive for conduct of examinations to ensure academic integrity
Technology Resources (AV, data show, Smart Board, software, etc.)	Smart Board PC that has MS Office and connected to the Internet and projector
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Evaluation Form	Students	Direct
Course learning outcomes	Students	Direct
Average performance in assignments and exams	Instructor	Indirect
Chairperson evaluation	Chairperson	Direct
Course Portfolio Evaluation	Chairperson	Direct

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	