



BUSN 368 - Productivity & Plant Management

Form number	COURSE OUTLINE/ DOCUMENT	
QEC-ISOB-D1-CW 0.3		
COURSE INSTRUCTOR INFORMATION	Name	Muhammad Salman Bilal
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DEGREE INFORMATION	Program	BS Business	Batch	2024	Section(s)	A B	Semester	SPRING
	Year	2023						

COURSE INFORMATION	Course Category	C- Core/ E-Elective	Code	BUSN 368	Title	Productivity & Plant Management	Credit hours	3
	E - Elective		Code	BUSN 360	Title	Project & Operations Management	Credit hours	3
	Prerequisite(s)		Code	BUSN 360	Title	Project & Operations Management	Credit hours	3
	TA Required (Yes/ No)	No	No. of TA(s)	N/A	Brief Justification			
	No. of TA(s)	N/A	None					

TEXTBOOK(S) INFORMATION	Title of Book	Operations Management	Edition	12
	Author(s)	Heizer, Render		
	Publisher	Pearson Press		

Reference Book (s)	1.	Title of Book	Basic Practices in Planning & Performance Management, 3 rd Ed.	
		Imprint details	John Wiley & Sons, Inc., David A. J. Axson	
	2.	Title of Book	Productivity Engineering & Management	
		Imprint details	McGraw Hill Book Company, David J Sumanth	
	3.	Title of Book	Total Quality of Management	
		Imprint details	Pearson Press, Tapan K Bose	
	Support Material(s)	a.	ASQ® USA Journals	
		b.	PMI® USA News-letter & Journals	
		c.	Research Papers relevant to Trending Topics	
		d.	Excerpts from PMI USA Standards Benefits Realization Management, 1 st Edition (2019) Standard on Portfolio Management, 4 th Edition (2017-2021) Project Management Body of Knowledge, 7 th Edition (2021-2026) Process Groups: A Practice Guide, 1 st Edition (2023-2027)	



Productivity through effective Plant Management in intelligently envisioned Operations Excellence guided Strategic Enablers to improve SCM and Operations within proficiently coordinated programs through project portfolio management is the comprehensive description of this course.

Critical success factor is enhancement of Productivity through Plant Management grouted to Production Planning and Control to support forty percent of the entire job market demands belonging to Operations Majors while over-lapping diverse business domains including finance, accounts, marketing, sales, MIS, HR and Entrepreneurship.

Course will initiate from a thorough introduction to plant management from operations point of view i.e., management steering technical/engineering/operational activities and it'll conclude with applicability of productivity techniques in our industry by equipping business graduates with the basic technical subject related knowledge through academic literature and the best practices through case studies.

Basic understanding of plant management along with the associated terms, inputs, tools and techniques and outputs of Productivity related initiatives.

Salient features of the course are as follows

- Introduces improving efficiency of manufacturing processes by focusing on optimal utilization of plant and equipment with the objective of improving profitability
- Fundamentals of Plant Management as per manufacturing standards
- Understanding 'Productivity' explicitly covering Productivity Cycle in Plant Management
- Calculations regarding 'Productivity Measurement & Evaluation'
- Facets of 'Plant Productivity' in general and as per international standards
- Discussing the 'Established Management Techniques' to enhance plant productivity
- Understanding 'Plant Productivity Management' by real cases & local projects

Enabling students to configure the plant management scenarios and then apply productivity initiatives in these situations.



Course Objectives (CO): *(Brief & unambiguous) ... at least 5 COs*
a. tend to describe specific, discrete units of knowledge and skill
b. can be accomplished within a short time frame - still may be relevant for a class period
*c. tend to be **STATEMENTS OF INTENT**; do not necessarily suggest that the behavior has been demonstrate*

1.	Introducing fundamentals of Productivity within standardized Plant Management Scenarios as prescribed in pre-requisite course and extending concept in parallel with Plant Management for Ops Excellence
2.	Comprehending and comparing Portfolio Project Management, Program driven Value Delivery mechanisms through Productivity and Plant Management
3.	Elaborating core components of Plant Management and demonstrating Productivity Calculation
4.	Understanding Change and its relationship with effective Plant Management within Production Planning and Control related Operations and subsequent extension of Change Control Management concepts to Productivity
5.	Comprehending globally acknowledged Risk Management Methodology based on appropriate and agreed upon risk identification, analyses and response related procedures to achieve Productivity
6.	Co-relating Key Performance Indicators with Key Risk Indicators for joint evolution required for maximizing Business value through controlling change for achieving positive risks (Opportunities)
7.	Elaborating role of Technology for routine Plant Management and Productivity related Challenges with special focus on CPEC based changing local perspective
8.	Elaborating Productivity Cycle while back-integrating to Academic researches and connecting to field-oriented challenges while professionally overseeing global productivity trends
9.	Comprehending Significant Productivity Management Approaches and comparing on timelines to better realize evolution of Productivity Measurement in consistent with Business Needs
10.	Integrating typical Productivity Management Cycle to any envisioned operational situations to elaborate and explain the productivity management in projectized way

Learning Outcome (LO): *(Brief & unambiguous-with reference to course objectives i.e. at least 5 LOs*
a. describe broad aspects of behavior which incorporate a wide range of knowledge and skill
b. accomplished over time in several learning experiences
*c. refer to **DEMONSTRATIONS OF PERFORMANCE***

a.	Differentiating Productivity Management for simple Production of Operations Management by helping students develop real-life scenarios customized to local business conditions
b.	Interconnecting different facets of Management Paradigm including Portfolio, Program, Project, Operations, SCM, Business Analysis to envision Productivity through effective Plan Management
c.	Understanding fundamental measurement components within Plant Management and extending concept to Services Industry as well
d.	Insinuating preferred sequence for effective Plant Management including Production Planning and Control related and Supply Chain Management based already laid out concepts
e.	Understanding Risk Identification, Risk Analysis and Risk Responses to support running Businesses and systematically structuring into Risk Registers
f.	Relating Key Performance Indicators (KPI) to Key Risk Indicators (KRI) involving infographic charts and qualifying for SMART criteria for students' envisioned Business Scenarios
g.	Capability to refer International Professional Bodies in field of Productivity Management (APO, APC, NPO) along-with knowledge of accessibility of the structured methodology for accomplishment
h.	Inter-relating different segments of Productivity Cycle to better synchronize with Production Planning and Control based Plant Management scenarios
i.	Competence to refer and comprehend the most appropriate Productivity Management Approach (Sumanth's Model, APC, TPM) for any envisioned/simulated field-oriented Productivity Scenario
j.	Deploying Productivity Techniques within Sumanth Proposed Productivity Cycle and model the concepts into field-based group activity followed by confident dissemination (presentations)



Course-ware STRUCTURE: (Mark X where applies)

Lecture (Lect)	Multimedia (MM)	Simulation (Sim)	IT Labs (Lab)	Case (CASE)	Individual Assignment (Assign)	Group Presentation (G-Pres)	Any other Medium
X	X	X		X	X	X	Stylus/Pen & iPad

COURSE CONTENTS:

Weeks	Contents/Topics	Courseware Events (MM/ IT Lab/Sim/Case Study/ Assignment/Presentation etc.)	Comments
Week - 0	Course Trailer: Uploaded on Moodle LMS (Who, What & How are covered)	LMS Moodle	
Week - 1	Chapter 1: Introduction Definition: Globalization, Latest Trends, Basic Calculations	MM, Case Study based Scenarios	
Week - 2	Productivity in SCM Logistics (MNC) Globalization, Operations Strategies for Multinational Companies	MM, Case Study	Assignment-1
Week - 3	Productivity in SCM Logistics (NW Corner/Intuitive) Realizing Productivity through Layouts, Transportation Model	MM, Case Study Facilitated Workshop	Simulation
Week - 4	Chapter 4: Driving Change Change for Good, Global trends, Productivity Challenges	MM, Case Study/ Workshop mode	Workbook-1 Quiz-1
Week - 5	SMART Goals vs OKRs vs KPIs Definition, Comparison, Application	MM, Case Study	Facilitated Workshop
Week - 6	Performance Management (BP through Collaboration) Definition, Operations Strategies for Multinational Companies	MM, Case Study	Facilitated Workshop
Week - 7	Chapter 2 & 9: Key Risk Indicators (KRI) Key Performance Indicators, Key Risk Indicators, Co-relation of KPI & KRI	MM, Case Study	Scenario based Facilitated Workshop
Week - 8	Chapter 9: Risk as Opportunity (Risk Register) Tools & Techniques for Risk identification, Risk Response Strategies	MM, Case Study based Scenarios.	Scenario based Facilitated Workshop
Week - 9	Mid-Term Exam		Review of Mids
Week - 10	International Productivity Bodies Productivity: American Case, Asian Market Trends, International Bodies	MM, Case Study based Scenarios. Interactive workshop mode	Deming's Wheel
Week - 11	Productivity Management / TPM Total Productivity Model (TPM), American Productivity Council (APC), Critique	MM, Case Study/ Workshop	
Week - 12	Productivity Measurement History of Measurement Models, Sumanth's Productivity Model	MM, Case Study based Scenarios. Interactive workshop mode	Project Critique
Week - 13	Productivity Evaluation Productivity Enhancement Techniques (PET), Configuration and Calculations	MM, Case Study/ Scenario	Project Critique
Week - 14	Productivity Planning Alternative Analysis for Optimized Solution, Appropriate Resource Levelling	MM, Interactive workshop mode	Project Critique
Week - 15	Productivity Improvement Simulating Scenarios, Project Presentation	MM, Case Study, Interactive workshop	Report Submission <i>Viva</i>



Recommended Web links:

- www.apo-tokyo.org
- www.npo.gov.pk
- www.iiba.com
- www.pmi.org
- www.asq.org

Grading Criteria

ABSOLUTE Grading: NO	RELATIVE Grading: YES
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Marks Distribution:

Particulars	% Weightage Marks
1. Class Participation Activities / Forman Values	10
2. Quizzes / Case Studies	15
3. Mid – Term Exam	25
4. Assignments / Workbooks	10
5. Project Presentation (Video)	15
6. Final – Term Exam & Report Submission	25
Total: -	100

Qualifying Attendance:	<p>You must attend every class for your own personal benefit. Please refer to university policy of minimum attendance requirement (i.e., 6 absentees for 90 minutes class duration and 9 absentees for 50 minutes class duration) Failing to conform qualifying attendance threshold, the student will stand debarred from sitting in the examination and assigned with “F” Grade.</p>
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Academic and Moral Integrity:	<p>All assignments should be your own work (or your group’s when approved). Zero Tolerance for plagiarism and will be reported as per university policy for academic and moral misconduct.</p>
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Special Instructions (Specific to the subject being taught)	<p>Course Slides are covering the Course Objectives whereas the similar numbered Workbooks carry the associated Learning Outcomes. Printouts of the provided reading material, especially the meticulously prepared and well-formatted slides, is highly recommended for better notes taking. Students are encouraged to start solving the Workbooks (for achieving Learning Outcomes) while studying the course slides and other reading material during the classes. In-time submissions are encouraged and acknowledged by awarding bonus points and late submissions of-course can-not qualify for such bonus points. Students are encouraged to inter-weave knowledge learnt from other courses within course contents of this subject for effective value delivery. Scenario-based assignments and workbooks eventually enable the students to become comfortable with real life challenging situations and add confidence to them to qualify for better job opportunities and entrepreneurial initiatives. Lean and agile approach towards creativity with special focus on Ethics & Professionalism.</p>
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