



INTECH 312 – MATERIAL TECHNOLOGY MANAGEMENT

UNIVERSITY VISION

A leading University in advancing scholarly innovation, multi-cultural convergence, and responsive public service in a borderless Region.

UNIVERSITY MISSION

The University shall primarily provide advanced instruction and professional training in science and technology, agriculture, fisheries, education and other related fields of study. It shall also undertake research and extension services, and provide progressive leadership in its areas of specialization.

UNIVERSITY STRATEGIC GOALS

- a. Deliver quality service to stakeholders to address current and future needs in instruction, research, extension, and production
- b. Observe strict implementation of the laws as well as the policies and regulations of the University
- c. Acquire with urgency state-of-the-art resources for its service areas
- d. Bolster the relationship of the University with its local and international customers and partners
- e. Leverage the qualifications and competences in personnel action and staffing
- f. Evaluate the efficiency and responsiveness of the University systems and processes

INSTITUTIONAL OUTCOMES (IO)

- a. Enhance competency development, commitment, professionalism, unity and true spirit of service for public accountability, transparency and delivery of quality services
- b. Provide relevant programs and professional trainings that will respond to the development needs of the region
- c. Strengthen local and international collaborations and partnerships for borderless programs
- d. Develop a research culture among faculty and students
- e. Develop and promote environmentally-sound and market-driven knowledge and technologies at par with international standards
- f. Promote research-based information and technologies for sustainable development
- g. Enhance resource generation and mobilization to sustain financial viability of the university

PROGRAM OUTCOMES (PO) COMMON TO ALL PROGRAMS AND ITS RELATIONSHIPS TO INSTITUTIONAL OUTCOMES

A graduate of Sultan Kudarat State University can:	INSTITUTIONAL OUTCOMES (IO)						
	a	b	c	d	e	F	g
a. discuss the current developments and advancements in the specific field of practice;	✓	✓					✓
b. demonstrate independently the 21 st century competencies and skills;	✓	✓		✓			✓
c. work collaboratively in multi-disciplinary and multi-cultural groups;	✓		✓	✓	✓		
d. exhibit professional, social and ethical accountability;	✓	✓	✓	✓	✓		
e. preserve Filipino historical and cultural heritage;	✓	✓	✓	✓	✓		
f. generate new knowledge through data-driven research and development projects; and				✓	✓	✓	✓
g. participate actively in the national, regional and local development plans.	✓	✓	✓	✓	✓	✓	✓

1	COURSE CODE	INTECH-312
2	COURSE TITLE	Material Technology Management
3	PREREQUISITE	None
4	CREDITS	3 units

5 COURSE DESCRIPTION

This course explores the core concepts, methodologies, and practical applications of material technology within production and operations management. It focuses on the effective selection, utilization, and regulation of materials to achieve high quality, cost-effectiveness, and management sustainability across manufacturing and service sectors. Key areas of study include material characteristics, classification, and testing; inventory management systems; purchasing and storage procedures; forecasting and order quantity strategies; production activity management; and warehouse and distribution operations. The course highlights the role of technology in material handling, monitoring, and process enhancement to promote lean manufacturing and just-in-time approaches. Through case analyses, problem-solving exercises, and practical activities, students will acquire skills in decision-making, cost evaluation, and material efficiency aligned with current industry standards.

6 COURSE LEARNING OUTCOMES (CLO) AND ITS RELATIONSHIPS TO PROGRAM OUTCOMES

Course Learning Outcomes (CLO)	Program Outcomes						
	a	b	c	d	e	f	g
At the end of the course, a student can:							
a. Explain the principles, functions, and scope of material technology in the context of production and operations management.	✓	✓	✓	✓	✓	✓	✓
b. Identify and classify different materials based on properties, functions, and applications in manufacturing and service industries.	✓	✓	✓	✓	✓	✓	✓
c. Apply appropriate inventory control systems, procurement strategies, and storage practices to ensure efficiency and cost-effectiveness.	✓	✓	✓	✓	✓	✓	✓
d. Analyze demand forecasts, order quantity models, and production activity data to support material planning and control decisions.	✓	✓	✓	✓	✓	✓	✓
e. Evaluate material handling methods, warehouse operations, and distribution systems for improved operational performance.	✓	✓	✓	✓	✓	✓	✓
f. Demonstrate decision-making, cost analysis, and problem-solving skills in material utilization aligned with industry best practices.	✓	✓	✓	✓	✓	✓	✓

7 COURSE CONTENTS

WEEK	CONTENT	INTENDED LEARNING OUTCOMES (ILOs)	TEACHING AND LEARNING ACTIVITIES (TLA)	OUTCOMES-BASED ASSESSMENT (OBA)	COURSE LEARNING OUTCOMES (CLOs)
1	Course Orientation <i>SKSU VMGO, Classroom Policies, Course Overview, Course Requirements, Grading System</i>	At the end of the week, the pre-service teacher (PST) can: a. discuss the University's VMGO, classroom policies, course overview, requirements and grading system	Discuss the VMGO of the University, the classroom policies, scope of the course, course requirements and grading system		
2	Materials Management an Introduction a. Meaning and Scope of the materials Management b. Objectives of Materials Management c. Significance of Materials Management	At the end of the week, the pre-service teacher (PST) can: a. Define materials management and explain its scope in the construction/industrial context. b. Enumerate and explain the primary objectives of materials management. c. Analyze the importance of materials management in achieving project success.	a. Class discussion on industry examples. b. Guided brainstorming session. c. Class debate on the role of materials management in competitiveness. d. Lecture-discussion with industry flowchart samples.	a. Short quiz on definitions and concepts. b. Written reflection on how objectives improve project outcomes. c. Problem solving worksheet graded for accuracy and logic. d. Short quiz on integration concepts.	a, b,d,e,f

	d. Materials Management in other management functions	d. Explain how materials management integrates with procurement, production, finance, and logistics.			
3	Production Planning System a. Manufacturing Planning and Control System b. Sales and Operations Planning c. Manufacturing Resource Planning d. Enterprise Resource Planning e. Making the Production Plan	At the end of the week, the pre-service teacher (PST) can: a. Manufacturing Planning and Control System. b. Explain the purpose and process of Sales and Operations Planning (S&OP). c. Describe Manufacturing Resource Planning (MRP II) and its integration with other functions. d. Define Enterprise Resource Planning (ERP) and identify its core modules. e. Analyze how production planning aligns with available resources and timelines.	a. Lecture with process flow diagrams. b. Lecture using S&OP templates. c. Discussion on benefits and challenges of MRP II. d. Demonstration of ERP modules via simulation. e. Guided exercise in developing a production plan.	a. Quiz on MPC concepts. b. Quiz on S&OP steps. c. Short-answer quiz on definitions and comparisons. d. Quiz on ERP modules and integration. e. Performance-based evaluation of planning accuracy.	a,b,d,f
4	Master Scheduling a. Introduction b. Relationship to Production Plan c. Developing a Master Production Schedule d. Production Planning, Master Scheduling, and Sales	At the end of the week, the pre-service teacher (PST) can: a. Define Master Scheduling and explain its purpose in production management. b. Differentiate between production planning and master scheduling. c. Apply scheduling techniques to meet production goals and resource constraints. d. Analyze the interaction between production planning, master scheduling, and sales forecasts.	a. Lecture with visual aids (flowcharts/timelines). b. Group discussion linking production plan data to the schedule. c. Guided hands-on exercise in developing an MPS. d. Class discussion on alignment strategies.	a. Identification of schedule components from a sample case. b. Quiz on relationships and differences. c. Quiz on MPS. d. Short quiz on integration concepts.	a,c,d,f.
5	Material Requirements Planning a. Introduction b. Bills of Material c. Material Requirements Planning Process d. Using the Material Requirements Plan	At the end of the week, the pre-service teacher (PST) can: a. Define Master Scheduling and explain its purpose in production management. b. Explain how Master Scheduling connects to the overall Production Plan. c. Apply scheduling techniques to meet production goals and resource constraints. d. Analyze the interaction between production planning, master scheduling, and sales forecasts.	a. Discussion of real-world Master Schedule examples. b. Group discussion linking production plan data to the schedule. c. Guided hands-on exercise in developing an MPS. d. Class discussion on alignment strategies.	a. Quiz on definitions and key terms. b. Quiz on relationships and differences. c. Submission of a completed MPS. d. Written case analysis linking scheduling to sales outcomes.	a,c,d,f.

6	<p>Capacity Management</p> <ul style="list-style-type: none"> a. Definition of Capacity b. Capacity Planning c. Capacity Requirements Planning d. Capacity Available e. Capacity Required f. Scheduling Orders g. Making the Plan 	<p>At the end of the week, the pre-service teacher (PST) can:</p> <ul style="list-style-type: none"> a. Define capacity in the context of production and operations management. b. Explain the purpose and process of capacity planning. c. Define CRP and explain its relationship to Master Scheduling and MRP. d. Determine the capacity available for production using given data. e. Compare capacity required vs. capacity available. f. Apply scheduling techniques to optimize capacity use. g. Integrate capacity data into a feasible and efficient production plan. 	<ul style="list-style-type: none"> a. Lecture with examples from manufacturing and service industries. b. Small group discussion on capacity challenges in different industries. c. Guided problem-solving exercises. d. Group activity to analyze sample capacity data. e. Guided examples using production schedules. f. Practical scheduling exercise using sample orders. g. Presentation of proposed plans with rationale. 	<ul style="list-style-type: none"> a. Quiz on capacity definitions. b. Case analysis identifying key capacity factors. c. Short quiz on CRP concepts and process. d. Quiz on capacity availability. e. Computation worksheet submission. f. Submission of an optimized order schedule. g. Group production plan submission. 	a,c,d,e,f.
7	<p>Production Activity Control</p> <ul style="list-style-type: none"> a. Data Requirements b. Order Preparation c. Scheduling d. Load Leveling e. Scheduling f. Load Leveling g. Scheduling Bottlenecks 	<p>At the end of the week, the pre-service teacher (PST) can:</p>	<ul style="list-style-type: none"> a. Identify the essential data needed for effective production activity control. b. Explain the steps involved in preparing production orders. c. Define scheduling and its purpose in production control. d. Analyze production workload to balance capacity and demand. e. Refine and optimize production schedules for efficiency. f. Reassess workload distribution to handle fluctuations in demand. g. Identify potential bottlenecks in the production process. 	<ul style="list-style-type: none"> a. Lecture with real-world examples of production data. b. Demonstration of sample production order forms. c. Guided practice creating simple schedules. d. Group discussion on strategies to avoid overloading resources. e. Instructor-led problem-solving workshop. f. Group problem-solving discussion. g. Lecture with bottleneck identification examples. 	a,c,d,f.
8	<p>Forecasting</p> <ul style="list-style-type: none"> a. Demand Management b. Demand Forecasting c. Characteristics of Demand d. Principles of Forecasting e. Collection and Preparation of Data 	<p>At the end of the week, the pre-service teacher (PST) can:</p>	<ul style="list-style-type: none"> a. Explain the concept and purpose of demand management. b. Define demand forecasting and its role in production planning. c. Identify key characteristics of demand (trend, seasonality, cyclical patterns, random) 	<ul style="list-style-type: none"> a. Lecture with industry examples. b. Lecture with real business forecasting examples. c. Lecture with graphical data interpretation. d. Lecture with principle-by-principle explanation. e. Demonstration of data collection tools and methods. f. Guided problem-solving on forecasting 	a,c,d,e,f.

	f. Forecasting Techniques g. Tracking the Forecast	<p>variation).</p> <p>d. Explain fundamental principles for accurate and reliable forecasting.</p> <p>e. Describe the process for collecting and cleaning data for forecasting.</p> <p>f. Apply various forecasting techniques (e.g., moving averages, exponential smoothing, regression analysis).</p> <p>g. Explain the importance of tracking forecasts for continuous improvement.</p>	<p>methods.</p> <p>g. Lecture with error measurement examples (MAD, MSE, MAPE).</p>	<p>data accuracy.</p> <p>f. Problem set on applying different forecasting techniques.</p> <p>g. Quiz on tracking signal computation and interpretation.</p>	
9	MIDTERM EXAM				
10	Inventory Fundamentals a. Aggregate Inventory Management b. Item inventory Management c. Inventory and the Flow of Material d. Supply and Demand Patterns e. Functions of Inventories f. Objectives of Inventory Management g. Inventory Costs	<p>At the end of the week, the pre-service teacher (PST) can:</p> <p>a. Explain the purpose and scope of aggregate inventory management.</p> <p>b. Distinguish between ABC classification and other item-level inventory control methods.</p> <p>c. Describe how inventory supports and interacts with material flow in production.</p> <p>d. Identify different supply and demand patterns affecting inventory levels.</p> <p>e. Relate functions to specific industry scenarios.</p> <p>f. Explain the objectives of inventory management and their link to organizational goals.</p> <p>g. Identify different types of inventory costs (ordering, carrying, shortage, etc.).</p>	<p>a. Lecture with supply chain examples.</p> <p>b. Lecture with diagram-based explanation.</p> <p>c. Lecture with flowchart examples.</p> <p>d. Lecture with real world data sets.</p> <p>e. Lecture with illustrated examples.</p> <p>f. Lecture with real-world case examples.</p> <p>g. Lecture demonstration of cost formulas.</p>	<p>a. Short quiz on key concepts.</p> <p>b. Problem-solving exercises on item control.</p> <p>c. Short quiz on material flow concepts.</p> <p>d. Worksheet identifying supply and demand trends.</p> <p>e. Scenario-based written test.</p> <p>f. Reflection paper on inventory objectives.</p> <p>g. Problem set on inventory cost calculations.</p>	a,b,d,e,f,
11	Order Quantities a. Economic Order Quantity b. Variations of the EOQ Model c. Quantity Discounts d. Order Quantities for Families of Product When Costs are not Known. e. Period Order Quantity	<p>At the end of the week, the pre-service teacher (PST) can:</p> <p>a. Define EOQ and explain its role in inventory cost minimization.</p> <p>b. Identify common EOQ variations such as Production Order Quantity and EOQ with shortages.</p> <p>c. Explain the effect of price breaks on EOQ decisions.</p> <p>d. Apply proportional allocation or heuristic techniques to determine quantities.</p> <p>e. Define POQ and explain its purpose.</p>	<p>a. Lecture with step-by-step EOQ derivation</p> <p>b. Lecture with illustrative examples</p> <p>c. Lecture with formula application</p> <p>d. Lecture with industry examples</p> <p>e. Lecture with computation examples</p>	<p>a. Problem-solving quiz on EOQ.</p> <p>b. Written exam with computational problems.</p> <p>c. Problem-solving test on EOQ with discounts.</p> <p>d. Group project report proposing order allocations.</p> <p>e. Short quiz on POQ concepts and application scenarios.</p>	a,c,e,f,

12	<p>Independent Demand Ordering Systems</p> <ul style="list-style-type: none"> a. Order Point System b. Determining Safety Stock c. Determining Service Levels d. Different Forecast and Lead-Time Intervals e. Determining When the order point is reached. f. Periodic review system g. Distribution Inventory 	<p>At the end of the week, the pre-service teacher (PST) can:</p> <ul style="list-style-type: none"> a. Explain the concept and importance of the order point system. b. Define safety stock and its role in avoiding stockouts. c. Describe service level and its relationship to customer satisfaction. d. Identify how forecast and lead-time intervals affect inventory decisions. e. Implement timely reordering actions to avoid stockouts. f. Explain the periodic review system and how it differs from continuous review. g. Explain distribution inventory and its function in supply chains. 	<ul style="list-style-type: none"> a. Discussion on industry applications b. Lecture on safety stock concepts c. Group activity comparing service levels in industries d. Lecture on forecasting and lead time adjustments. e. Demonstration of reorder point tracking systems. f. Lecture with example problems. g. Lecture with supply chain flow diagrams. 	<ul style="list-style-type: none"> a. Problem-solving quiz on order point formulas. b. Short written analysis recommending safety stock levels for a given case. c. Short-answer quiz on service levels. d. Problem-solving activity adjusting inventory plans. e. Performance-based assessment identifying reorder points in simulations. f. Written essay on advantages/disadvantages of the system. g. Written test on distribution inventory principles. 	a,c,d,e,f.
13	<p>Physical Inventory and Warehouse Management</p> <ul style="list-style-type: none"> a. Warehousing Management b. Physical Control and Security c. Inventory Record Applications d. Technology Applications 	<p>At the end of the week, the pre-service teacher (PST) can:</p> <ul style="list-style-type: none"> a. Explain the principles and objectives of warehouse management. b. Describe methods for maintaining physical control over inventory. c. Describe methods for maintaining physical control over inventory. d. Demonstrate the application of technology for tracking and managing inventory. 	<ul style="list-style-type: none"> a. Lecture with diagrams of warehouse layouts. b. Lecture with examples of control and security measures. c. Hands-on practice with inventory recording systems. d. Group discussion on technological trends in warehousing. 	<ul style="list-style-type: none"> a. Written quiz on warehouse management principles. b. Short-answer quiz on security best practices. c. Practical assessment on updating inventory records. d. Quiz on technology applications in inventory control. 	a,c,d,f.
14	<p>Physical Distribution</p> <ul style="list-style-type: none"> a. Physical Distribution System b. Interfaces c. Transportation d. Legal Types of Carriage e. Transportation Cost Elements f. Warehousing 	<p>At the end of the week, the pre-service teacher (PST) can:</p> <ul style="list-style-type: none"> a. Define and explain the components and objectives of a physical distribution system. b. Assess the importance of coordination across these interfaces. c. Explain the significance of transportation in physical distribution. d. Describe the legal classifications of carriage (common, contract, private carriers). e. Analyze the impact of transportation costs on overall distribution efficiency. f. Differentiate between types of warehouses and their functions. 	<ul style="list-style-type: none"> a. Lecture with supply chain flow diagrams. b. Interactive lecture using cross-functional process maps. c. Lecture with examples of transportation modes. d. Lecture with examples from logistics contracts. e. Discussion on cost-reduction strategies. f. Lecture with examples of warehouse operations. 	<ul style="list-style-type: none"> a. Written quiz on distribution system concepts. b. Reflection paper on the role of interdepartmental cooperation. c. Multiple-choice quiz on transportation modes. d. Written assignment summarizing legal implications. e. Multiple-choice test on cost elements. f. Written quiz on warehousing concepts. 	a,c,d,e,f.

15	<p>Products and Processes</p> <ul style="list-style-type: none"> a. Need for New Products b. Product Development Principles c. Product Specification and Design d. Process Design e. Factors Influencing Process Design f. Processing Equipment g. Process Systems 	<p>At the end of the week, the pre-service teacher (PST) can:</p> <ul style="list-style-type: none"> a. Explain the importance of developing new products in response to market demands and technological changes. b. Describe the stages in product development. c. Define product specifications and their role in ensuring quality. d. Explain the purpose of process design in manufacturing and service industries. e. Identify key factors such as technology, cost, quality, and regulations affecting process design. f. Identify types of processing equipment used in manufacturing. g. Explain the concept of process systems and their components. 	<ul style="list-style-type: none"> a. Lecture with industry examples of successful product launches. b. Lecture on product life cycle and development stages. c. Lecture on specification standards and documentation. d. Group workshop on creating process flowcharts. e. Lecture with factor-analysis examples. f. Lecture with images/videos of processing equipment. g. Lecture on process system types. 	<ul style="list-style-type: none"> a. Short-answer questions on new product development. b. Quiz on product development principles. c. Assessment of written specifications. d. Quiz on process design concepts. e. Scenario-based problem-solving assessment. f. Quiz on equipment types and functions. g. Multiple-choice test on system types. 	
16	<p>Just in time Manufacturing and lean Production</p> <ul style="list-style-type: none"> a. Total Quality Management b. Quality Cost Concepts c. Variation as a Way Life d. Process Capability e. Process Control f. Sample Inspection 		<p>At the end of the week, the pre-service teacher (PST) can:</p> <ul style="list-style-type: none"> a. Explain the philosophy and principles of TQM in manufacturing. b. Identify and classify the different categories of quality costs (prevention, appraisal, internal failure, external failure). c. Explain why variation is inherent in manufacturing processes. d. Define process capability and related indices (C_p, C_{pk}). e. Explain the principles of statistical process control (SPC). f. Evaluate the effectiveness of sampling inspection in quality control. 	<ul style="list-style-type: none"> a. Lecture with real-world TQM case studies. b. Lecture with examples of quality cost breakdowns. c. Group brainstorming on sources of variation. d. Lecture with process capability examples. e. Lecture on control chart types and interpretation. f. Activity designing a sampling plan. 	<ul style="list-style-type: none"> a. Quiz on TQM concepts. b. Written analysis of quality cost impact. c. Group presentation on variation reduction strategies. d. Worksheet submission with calculated C_p/C_{pk} values. e. Practical test on SPC application. f. Assessment of designed sampling plan.
17	<p>Total Quality Management</p> <ul style="list-style-type: none"> a. Total Quality Management b. Quality Cost Concepts c. Process Capability d. Process Control 		<p>At the end of the week, the pre-service teacher (PST) can:</p> <ul style="list-style-type: none"> a. Apply TQM principles to real-world manufacturing or service contexts. b. Classify and explain the four categories of quality costs (prevention, appraisal, internal failure, external failure). 	<ul style="list-style-type: none"> a. Interactive lecture on TQM fundamentals. b. Lecture on cost categories with industry examples. c. Lecture and discussion on process capability concepts. d. Data analysis activity using SPC tools. e. Hands-on activity creating a sampling plan. 	<ul style="list-style-type: none"> a. Written quiz on TQM assessment (OBA) b. Computation-based quiz on quality costs. c. Quiz on capability interpretation. d. Assessment on control chart creation. e. Evaluation of designed sampling plan.

e. Sample Inspection	c. Define process capability and capability indices (Cp, Cpk). d. Explain the purpose and principles of Statistical Process Control (SPC). e. Develop a sampling inspection plan for a given process.		
18		FINAL EXAMINATION	

Total No. of Hours : 54

8 COURSE REQUIREMENTS AND COURSE POLICIES

Each student is required to:

COURSE REQUIREMENTS

1. submit accomplished assignments, problem sets and a mini-research project;
2. prepare a comprehensive lecture notebook;
3. make a PowerPoint presentation, and a written summary of the assigned report;
4. discuss an assigned topic to report and participate in class discussions; and
5. pass the major exams (midterm and final)

Attendance: A student will be marked late if he/she enters the class 5 minutes after start of class period. Any student who comes to class 15 minutes after the scheduled time or always late for three consecutive meetings shall be marked absent.

Missed work or exam: Any student who missed to submit a work assignment or to take a test should consult the concerned instructor for immediate compliance

Cheating and Plagiarism: Any student who committed any form of academic dishonesty (e.g., copy-paste plagiarism) shall be given disciplinary action provided in the SKSU Student's

Handbook

Use of Technology: Cell phones should be turned off while the session is in progress. Using laptops, notebook PCs, smart phones, and tablets shall be allowed only when needed. A scientific calculator (e.g. Casio fx-991ES) shall be utilized in solving.

9 GRADING SYSTEM AND RUBRICS FOR GRADING

GRADING SYSTEM

Midterm Grade

Midterm Examination	50%
Attendance/ Class Participation	10%
Quizzes	15%
Project (E-Portfolio/ Lesson Plan)	15%
Assignment/Problem Sets	10%
TOTAL	100%

Final Term Grade

Final Term Examination	50%
Attendance/Class Participation	10%
Quizzes	15%
Project (E-Portfolio/ Lesson Plan)	15%
Assignment/Problem Sets	10%
TOTAL	100%

FINAL GRADE

Midterm Grade	50%
Final Term Grade	50%
TOTAL	100%

RUBRICS FOR THE INDIVIDUAL PERFORMANCE

CRITERION	UNSATISFACTORY 1	FAIR 2	GOOD 3	EXCELLENT 4
Understanding of QC/QA Principles	<ul style="list-style-type: none"> Shows major errors or misconceptions about basic quality control and assurance concepts. 	<ul style="list-style-type: none"> Demonstrates a basic or partial understanding of QC/QA principles, with gaps in clarity. 	<ul style="list-style-type: none"> Explains QC/QA concepts accurately and connects them to the activity or context. 	<ul style="list-style-type: none"> Demonstrates a deep and comprehensive understanding of QC/QA concepts, clearly relating them to industry standards and best practices.
Application of QC/QA Methods	Unable to apply QC/QA procedures or fails to relate them to the given task or scenario.	<ul style="list-style-type: none"> Applies QC/QA methods with limited justification or partial relevance to the situation. 	<ul style="list-style-type: none"> Correctly applies QC/QA methods with partial justification of their importance. 	<ul style="list-style-type: none"> Applies QC/QA methods accurately with complete, well-supported justifications and links to real-world industry practices.
Use of Standards and Regulations	<ul style="list-style-type: none"> Shows little to no knowledge of relevant industry standards or regulations. 	<ul style="list-style-type: none"> Identifies some applicable standards or regulations but with minor errors or incomplete coverage. 	<ul style="list-style-type: none"> Correctly references and uses applicable standards and regulations in the context of QC/QA. 	<ul style="list-style-type: none"> Consistently and accurately integrates relevant standards and regulations, showing full compliance in all justifications and applications.
Examples and Case References	<ul style="list-style-type: none"> Provides no examples, or uses irrelevant ones unrelated to QC/QA. 	<ul style="list-style-type: none"> Provides examples that are somewhat relevant but contain inaccuracies or weak connections. 	<ul style="list-style-type: none"> Gives appropriate and relevant examples or case studies to support explanations. 	<ul style="list-style-type: none"> Presents well-chosen, highly relevant, and logically sequenced examples or case studies that significantly enhance understanding.
Technical Communication	<ul style="list-style-type: none"> Frequently misuses QC/QA terms and definitions. 	<ul style="list-style-type: none"> Uses correct technical terms most of the time, with minor errors. 	<ul style="list-style-type: none"> Uses QC/QA-related terms and definitions correctly and appropriately. 	<ul style="list-style-type: none"> Demonstrates precise, consistent, and advanced use of QC/QA terminology, ensuring clarity and accuracy.
Presentation Structure	<ul style="list-style-type: none"> Lacks organization; explanation is unclear or incomplete. 	<ul style="list-style-type: none"> Has a basic structure with an introduction and conclusion but lacks smooth flow. 	<ul style="list-style-type: none"> Maintains a clear structure with logical flow and some smooth transitions. 	<ul style="list-style-type: none"> Delivers a well-structured, polished presentation with strong transitions, an engaging introduction, and a concise, impactful conclusion.
Use of Standards and Regulations	<ul style="list-style-type: none"> Shows little to no knowledge of relevant industry standards or regulations. 	<ul style="list-style-type: none"> Identifies some applicable standards or regulations but with minor errors or incomplete coverage. 	<ul style="list-style-type: none"> Correctly references and uses applicable standards and regulations in the context of QC/QA. 	<ul style="list-style-type: none"> Consistently and accurately integrates relevant standards and regulations, showing full compliance in all justifications and applications.

10 REFERENCES

Textbooks

J. R. Tony Arnold, Stephen N. Chapman, Lloyd M. Clive,(2008) *Introduction to Materials Management Sixth Edition*, Upper Saddle River, New Jersey Columbus, Ohio.

Online References

https://ebooks.ipude.in/management/mba/term_4/DMGT525_MATERIALS_MANAGEMENT.pdf

Prepared by:

ROMEL P. RECOPUERTO, MTE
Valdez

JONATHAN T. VALDEZ JR., LPT
Name of Faculty

Reviewed by:


GLENN S. TALUA, MERE
Program Chairperson

2025 -08- 11

Approved by:


CHARLIE J. MAGHANOY, Edd
College Dean