

SUPPLY CHAIN PRACTITIONER

Knowledge modules

333905-000-01-00 KM-01 Introduction to supply chain management, NQF level 5, Credits 8
 333905-000-01-00 KM-02 Demand execution management operations, NQF level 5, Credits 8
 333905-000-01-00 KM-03 Transport and distribution operations, NQF level 5, Credits 8
 333905-000-01-00 KM-04 Warehousing and facilities operations, NQF level 5, Credits 8
 333905-000-01-00 KM-05 Production operations, NQF level 5, Credits 8
 333905-000-01-00 KM-06 Procurement operations, NQF level 5, Credits 8
 333905-000-01-00 KM-07 Returns management, NQF level 5, Credits 6
 333905-000-01-00 KM-08 Performance management and improvement of operations, NQF level 5, Credits 6

Total credits 60

Module Title 333905-000-01-00 KM-01	Introduction to supply chain management, NQF level 5, Credits 8
Purpose	<p>The main focus of the learning in this knowledge module is to build an understanding of the supply chain as an integrated system.</p> <p>The learning contract time, which is the time that reflects the required duration of enrolment for this module, is at least 10 days.</p> <p>The learning will enable learners to demonstrate an understanding of</p>
Topics	<p>Supply chain concepts (50%)</p> <p>Supply chain management processes (50%)</p>

KM-01-KT01 Supply chain concepts (50%)	
Topic elements	Assessment Criteria
Essential components of a supply chain	<ul style="list-style-type: none"> Identify the key elements and processes of a supply chain and how they interact.
Fundamental concepts and principles of supply chain management	<ul style="list-style-type: none"> Describe the basic concepts of supply chain management and its essential role in an organization.
Key roles of supply chain management	<ul style="list-style-type: none"> Identify the key roles that supply chain management plays in improving customer service, reducing operating costs, and improving financial performance for organizations small or large, national or global Define the requirements and challenges of moving products across global supply chains. Discuss how to assess the performance of supply chains using standard metrics and frameworks.

KM-01-KT02 Supply chain management processes (50%)	
Topic elements	Assessment Criteria
Supply chain management processes	<ul style="list-style-type: none"> Identify principles and strategies for establishing efficient, effective, and sustainable supply chains.
Internal and external supply chain integration	<ul style="list-style-type: none"> Identify internal sources of supply chain fragmentation Identify external sources of supply chain fragmentation Identify internal mechanisms for supply chain integration Identify external mechanisms for supply chain integration
Supply chain tools, and technologies	<ul style="list-style-type: none"> Explain the critical roles of technology in supply chain planning, visibility, and execution
Supply chain trade-offs	<ul style="list-style-type: none"> Trade-offs between inventory and transportation costs as a critical element in managing inventory effectively, including understanding how carrying costs can affect inventory decisions

Provider Programme Accreditation Criteria

Physical Requirements:

- Hand-outs, learning materials and resources

Human Resource Requirements:

- Facilitator should have at least a Level 6 qualification or proven experience of at least 3 years related to supply chain management
- Facilitator/learner ratio 1 to 25

Legal Requirements:

- None

Exemptions

- None

Module Title 333905-000-01-00 KM-02	Demand execution management operations, NQF level 5, Credits 8
Purpose	<p>The main focus of the learning in this knowledge module is to build an understanding of demand execution management activities</p> <p>The learning contract time, which is the time that reflects the required duration of enrolment for this module, is at least 10 days.</p> <p>The learning will enable learners to demonstrate an understanding of</p>
Topics	<p>Customer/end user relationship management (25%)</p> <p>Customer service management (25%)</p> <p>Customer order management (25%)</p> <p>Managing service delivery (25%)</p>

KM-02-KT01 Customer/end user relationship management (25%)	
Topic elements	Assessment Criteria
Introduction to customer relationship management	<ul style="list-style-type: none"> • Explain the basic principles of customer relationship management
Customer and service segmentation	<ul style="list-style-type: none"> • Explain the process of customer segmentation • Explain the process of service segmentation

KM-02-KT02 Customer service management (25%)	
Topic elements	Assessment Criteria
Dimensions of customer services	<ul style="list-style-type: none"> • Define different elements of customer services
Service delivery	<ul style="list-style-type: none"> • Define service levels • Explain measurements of service delivery
Service level agreements (SLAs)	<ul style="list-style-type: none"> • Define the concepts and use of service level agreements • Define aspects that normally form part of service level agreements
Service recovery	<ul style="list-style-type: none"> • Define basic principles of service recovery

KM-02-KT03 Customer order management (25%)	
Topic elements	Assessment Criteria
Customer order forecast	<ul style="list-style-type: none"> • Explain the concept of customer forecasts and explain how it forms part of supply chain planning • Explain the process of updating customer forecast and the

	necessity to do it regularly
Customer order processes	<ul style="list-style-type: none"> • Explain the processes to be followed when receiving and processing customer orders • Explain the concepts of ATP (Available to promise) and CTP (Capable to promise) • Explain the different types of order management including automated replenishment and vendor managed inventory

KM-02-KT041 Managing service delivery (25%)	
Topic elements	Assessment Criteria
Planning order delivery	<ul style="list-style-type: none"> • Explain the process of planning order delivery
Credit control	<ul style="list-style-type: none"> • Explain the key principles of managing customer credit levels
Service execution management	<ul style="list-style-type: none"> • Explain the interactions between different units involved in order delivery • Explain measures of service delivery performance • Explain the key principles of service recovery

Provider Programme Accreditation Criteria

Physical Requirements:

- Hand-outs, learning materials and resources

Human Resource Requirements:

- Facilitator should have at least a Level 6 qualification or proven experience of at least 3 years related to supply chain management
- Facilitator/learner ratio 1 to 25

Legal Requirements:

- None

Exemptions

- None

Module Title 333905-000-01-00 KM-03	Transport and distribution operations, NQF level 5, Credits 8
Purpose	<p>The main focus of the learning in this knowledge module is to build an understanding of transport and distribution activities.</p> <p>The learning contract time, which is the time that reflects the required duration of enrolment for this module, is at least 10 days.</p> <p>The learning will enable learners to demonstrate an understanding of</p>
Topics	<p>Introduction to transport and distribution operations (50%)</p> <p>Transport planning and control (50%)</p>

KM-03-KT01 Introduction to transport and distribution operations (50%)	
Topic elements	Assessment Criteria
Concepts of transportation management	<ul style="list-style-type: none"> • Describe the basic concepts of transportation management and its essential role in demand fulfilment. • Explain the critical role of technology in managing transportation operations and product flows.
Specialised cargo	<ul style="list-style-type: none"> • Identify different types of specialised cargo and the impact thereof on transport mode and transport operations

Transport modes	<ul style="list-style-type: none"> Identify different transport modes including airfreight, sea freight, rail and road Describe the characteristics of different transport modes and when to use which mode Explain the concept of multi modal transport
Key elements and processes	<ul style="list-style-type: none"> Describe the key elements and processes in managing transportation operations and how they interact.
	<ul style="list-style-type: none"> Identify principles and strategies for establishing efficient, effective, and sustainable transportation operations.
	<ul style="list-style-type: none"> Impact of proper management of distribution activities on the fulfilment of customer demand and the ultimate success of a supply chain
Global transport	<ul style="list-style-type: none"> Define the requirements and challenges of planning and moving goods between countries Explain concepts of clearing and forwarding
Transport performance management	<ul style="list-style-type: none"> Discuss how to assess the performance of transportation operations using standard metrics and frameworks

KM-03-KT02 Transport planning and control (50%)	
Topic elements	Assessment Criteria
Transport planning	<ul style="list-style-type: none"> Define the requirements and challenges of planning and moving goods between countries.
	<ul style="list-style-type: none"> Explain the concept of transport capacity planning Explain the concept of routing and scheduling Explain the concept of transport optimisation Identify key transport regulations Discuss key principles and regulations related to personnel planning
Transport control	<ul style="list-style-type: none"> Discuss how to assess the performance of transportation operations using standard metrics and frameworks Explain the concept of control towers and command centres
Transport interfaces	<ul style="list-style-type: none"> Explain critical transport interfaces with customer order management Explain critical transport interfaces with warehousing and facilities Explain critical transport interfaces with technical maintenance

Provider Programme Accreditation Criteria

Physical Requirements:

- Hand-outs, learning materials and resources

Human Resource Requirements:

- Facilitator should have at least a Level 6 qualification or proven experience of at least 3 years related to supply chain management
- Facilitator/learner ratio 1 to 25

Legal Requirements:

- None

Exemptions

- None

Module Title	Warehousing and facilities operations, NQF level 5, Credits 8
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333905-000-01-00 KM-04	
Purpose	<p>The main focus of the learning in this knowledge module is to build an understanding of warehousing and facilities activities.</p> <p>The learning contract time, which is the time that reflects the required duration of enrolment for this module, is at least 10 days.</p> <p>The learning will enable learners to demonstrate an understanding of</p>
Topics	<p>Introduction to warehousing and facilities (50%)</p> <p>Warehousing and facilities planning and control (40%)</p>

KM-04-KT01 Introduction to warehousing and facilities (50%)	
Topic elements	Assessment Criteria
Concepts of inventory management	<ul style="list-style-type: none"> Describe the basic concepts of inventory management and its essential role in meeting customer demand. Identify the key elements and processes in inventory management and how they interact. Identify principles and strategies for establishing efficient and effective flows of inventory across the supply chain. Explain the critical role of technology in planning and managing inventory. Define the requirements and challenges of inventory management on a global basis. Discuss how to assess the performance of inventory management using standard metrics and frameworks. New approaches to reducing inventory including postponement, vendor-managed inventories, cross-docking, and quick response systems. Impact of number of inventory locations on level of inventory.
Concepts of warehousing and facilities	<ul style="list-style-type: none"> Discuss standard warehousing processes including receiving, put-away, storage, picking, marshalling and despatch. Discuss effects of warehousing design and service decisions on total logistics costs and customer service. Describe the basic concepts of warehousing management and its essential role in demand fulfilment. Explain the critical role of technology in managing warehouse operations and product flows. Describe key health and safety regulatory requirements related to warehousing and the storage of products.
Specialised products	<ul style="list-style-type: none"> Identify different types of specialised products and the impact thereof on warehousing design, storage and handling.
Types of warehouses and storage	<ul style="list-style-type: none"> Discuss different types of warehousing and storage options
Key elements and processes	<ul style="list-style-type: none"> Identify the key elements and processes in managing warehousing operations and how they interact.
Warehouse and facilities performance management	<ul style="list-style-type: none"> Discuss how to assess the performance of warehousing and facilities operations using standard metrics and frameworks.

KM-04-KT02 Warehousing and facilities planning and control (50%)	
Topic elements	Assessment Criteria
Warehousing and facilities planning	<ul style="list-style-type: none"> Identify principles and strategies for planning and managing warehouse operations. Explain the concept of warehousing and facilities capacity planning. Explain the concept of warehousing and facilities optimisation. Identify key warehousing and facilities regulations.

	<ul style="list-style-type: none"> • Discuss key principles and regulations related to personnel planning. • Identify principles and strategies for designing materials handling operations within a warehousing facility.
Warehousing and facilities control	<ul style="list-style-type: none"> • Discuss how to assess the performance of warehousing and facilities operations using standard metrics and frameworks. • Explain the concept of control towers and command centres.
Warehousing and facilities interfaces	<ul style="list-style-type: none"> • Explain critical warehousing and facilities interfaces with customer order management. • Explain critical warehousing and facilities interfaces with transport operations. • Explain critical warehousing and facilities interfaces with technical maintenance.

Provider Programme Accreditation Criteria

Physical Requirements:

- Hand-outs, learning materials and resources

Human Resource Requirements:

- Facilitator should have at least a Level 6 qualification or proven experience of at least 3 years related to supply chain management
- Facilitator/learner ratio 1 to 25

Legal Requirements:

- None

Exemptions

- None

Module Title 333905-000-01-00 KM-05	Production operations, NQF level 5, Credits 8
Purpose	<p>The main focus of the learning in this knowledge module is to build an understanding of production activities.</p> <p>The learning contract time, which is the time that reflects the required duration of enrolment for this module, is at least 10 days.</p> <p>The learning will enable learners to demonstrate an understanding of</p>
Topics	<p>Introduction to production operations (50%)</p> <p>Production operations planning and control (50%)</p>

KM-05-KT01 Introduction to production operations (50%)	
Topic elements	Assessment Criteria
Concepts of production operations	<ul style="list-style-type: none"> • Describe the basic concepts of production operations and its essential role in meeting customer expectations.
	<ul style="list-style-type: none"> • Identify principles and strategies for establishing efficient, effective, and sustainable production operations.
	<ul style="list-style-type: none"> • Explain the critical role of technology in managing production operations.
	<ul style="list-style-type: none"> • Define the requirements and challenges of production operations on a global basis.
Types of production processes	<ul style="list-style-type: none"> • Describe different types of production processes including

	<p>projects, job-shop, batch processing and continuous flow.</p> <ul style="list-style-type: none"> • Explain the impact of make to order (MTO), make to stock (MTS), assemble to order (ATO) and engineer to order (ETO) on the selection of the appropriate production process.
Key elements and processes	<ul style="list-style-type: none"> • Identify the key elements and processes in manufacturing and service operations and how they interact.
Production performance management	<ul style="list-style-type: none"> • Discuss how to assess the performance of production operations using standard metrics and frameworks.

KM-05-KT02 Production operations planning and control (50%)	
Topic elements	Assessment Criteria
Production operations planning	<ul style="list-style-type: none"> • Explain the concept of production operations capacity planning. • Explain the concept of production operations optimisation. • Identify key production operations regulations. • Discuss key principles and regulations related to personnel planning. • Discuss short-term operational decisions about issues such as operational scheduling and job assignments.
Production operations control	<ul style="list-style-type: none"> • Discuss how to assess the performance of production operations using standard metrics and frameworks. • Explain the concept of control towers and command centres.
Production operations interfaces	<ul style="list-style-type: none"> • Explain critical production operations interfaces with customer order management. • Explain critical production operations interfaces with transport operations. • Explain critical production operations interfaces with technical maintenance.

Provider Programme Accreditation Criteria

Physical Requirements:

- Hand-outs, learning materials and resources

Human Resource Requirements:

- Facilitator should have at least a Level 6 qualification or proven experience of at least 3 years related to supply chain management
- Facilitator/learner ratio 1 to 25

Legal Requirements:

- None

Exemptions

- None

Module Title 333905-000-01-00 KM-06	Procurement operations, NQF level 5, Credits 8
Purpose	<p>The main focus of the learning in this knowledge module is to build an understanding of procurement activities.</p> <p>The learning contract time, which is the time that reflects the required duration of enrolment for this module, is at least 10 days.</p> <p>The learning will enable learners to demonstrate an understanding of</p>

Topics	Introduction to procurement (50%) Procurement planning and control (50%)
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KM-06-KT01 Introduction to procurement (50%)	
Topic elements	Assessment Criteria
Concepts of procurement	<ul style="list-style-type: none"> Describe the basic concepts of procurement and its essential role in supply chain operations. Identify the key elements and processes in managing procurement and how they interact. Identify principles and strategies for establishing efficient, effective, and sustainable procurement. Explain the critical role of technology in procurement
Supplier relationship management (SRM)	<ul style="list-style-type: none"> Explain the basic principles of supplier relationship management. Explain the process of supplier segmentation. Explain the process of sourcing segmentation.
Types of materials and services	<ul style="list-style-type: none"> Describe the different categories of materials that will be sourced. Describe the different types of supplier relationships entered into. Describe how the procurement process will be different based on the type of product and relationship with the supplier.
Key elements of the procurement process	<ul style="list-style-type: none"> Identify the key elements and processes in procurement and how they interact.
Procurement performance management	<ul style="list-style-type: none"> Discuss how to assess the performance of procurement using standard metrics and frameworks.

KM-06-KT02 Procurement planning and control (50%)	
Topic elements	Assessment Criteria
Procurement planning	<ul style="list-style-type: none"> Explain the concept of material requirements planning. Identify key global trade restrictions on sourcing of materials. Discuss the importance of operation continuity and the need for uninterrupted material /service supply. Discuss risk analysis as part of procurement planning to ensure uninterrupted material /service supply.
Placement of material orders on suppliers	<ul style="list-style-type: none"> Explain the processes to be followed when placing orders on suppliers. Explain the concepts of ATP (Available to promise) and CTP (Capable to promise) as applicable to supplier orders. Explain the different types of order management including automated replenishment and vendor managed inventory as applicable to supplier orders.
Procurement control	<ul style="list-style-type: none"> Discuss how to assess the performance of procurement using standard metrics and frameworks. Describe an order tracking process to ensure on time delivery from suppliers. Explain how supplier performance can be integrated with the concept of control towers and command centres. Discuss processes for supplier performance management.
Procurement interfaces	<ul style="list-style-type: none"> Explain critical procurement interfaces with internal customer order management. Explain critical procurement interfaces with supplier order management.

Provider Programme Accreditation Criteria

Physical Requirements:

- Hand-outs, learning materials and resources

Human Resource Requirements:

- Facilitator should have at least a Level 6 qualification or proven experience of at least 3 years related to supply chain management
- Facilitator/learner ratio 1 to 25

Legal Requirements:

- None

Exemptions

- None

Module Title 333905-000-01-00 KM-07	Returns management, NQF level 5, Credits 6
Purpose	<p>The main focus of the learning in this knowledge module is to build an understanding of returns activities.</p> <p>The learning contract time, which is the time that reflects the required duration of enrolment for this module, is at least 7.5 days.</p> <p>The learning will enable learners to demonstrate an understanding of</p>
Topics	<p>Introduction to returns management (50%)</p> <p>Returns management planning and control (50%)</p>

KM-07-KT01 Introduction to returns management (50%)	
Topic elements	Assessment Criteria
Concepts of returns management	• Describe the basic concepts of returns management and its role in supply chain operations.
	• Identify the key elements and processes in returns management and how they interact.
	• Identify principles and strategies for establishing efficient, effective, and sustainable returns management.
	• Explain the critical role of technology in returns management.
Types of returns management	• Describe the different types of returns management including warranty claims, packaging returns, damaged goods and goods for recycling and disposal.
Key elements of the returns process	• Identify the key elements and processes in returns management and how they interact.
Returns management performance management	• Discuss how to assess the performance of returns management using standard metrics and frameworks.

KM-07-KT02 Returns management planning and control (50%)	
Topic elements	Assessment Criteria
Returns management planning	<ul style="list-style-type: none"> • Explain the concept of returns management planning. • Discuss risk and compliance analysis as part of returns management planning. • Discuss the integration of returns management planning with production and warehouse planning to ensure constant availability of returnable packaging.
Placement of orders for returns management	• Explain the processes to be followed for placing orders for returns management.
Returns management control	<ul style="list-style-type: none"> • Discuss how to assess the performance of returns management using standard metrics and frameworks. • Describe an order tracking process to ensure on time collection and delivery of returns.

Returns management interfaces	<ul style="list-style-type: none"> • Explain critical returns management interfaces with internal customers. • Explain critical returns management interfaces with external customers. • Explain critical returns management interfaces with suppliers.
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Provider Programme Accreditation Criteria

Physical Requirements:

- Hand-outs, learning materials and resources

Human Resource Requirements:

- Facilitator should have at least a Level 6 qualification or proven experience of at least 3 years related to supply chain management
- Facilitator/learner ratio 1 to 25

Legal Requirements:

- None

Exemptions

- None

Module Title 333905-000-01-00 KM-08	Performance management and improvement of operations, NQF level 5, Credits 6
Purpose	<p>The main focus of the learning in this knowledge module is to build an understanding of activities aimed at the improvement of performance and operations.</p> <p>The learning contract time, which is the time that reflects the required duration of enrolment for this module, is at least 7.5 days.</p> <p>The learning will enable learners to demonstrate an understanding of</p>
Topics	<p>Contract management (50%)</p> <p>Project management principles applied to supply chain planning and control (50%)</p>

KM-08-KT01 Contract management (50%)	
Topic elements	Assessment Criteria
Legal aspects relating to the performance of contracts	<ul style="list-style-type: none"> • Discuss elements of a legally binding agreement including contract terms, model form contracts and the use of standard contracts versus negotiated/ bespoke contracts. • Discuss terms that affect performance issues including definition of express terms, implied terms through legislation, case law and custom and implications of international laws. • Explain the recourses for non-performances in contract including vital and non-vital terms, identifying non-conformances/ breach of contracts, assessing damages, limits of liability and procedures for termination. • Explain the main approaches to conflict resolution in commercial contracts including negotiated settlements, the mechanisms of alternative dispute resolution, other mechanisms for dispute resolution, adjudication, arbitration and litigation and contractual provisions for dispute resolution.
Main approaches to achieve the management of contracts	<ul style="list-style-type: none"> • Discuss the assessment of the main type of contractual risk including internal, market, economic, legal, ethical sourcing and performance based risks, the role of information assurance and

	<p>the assessment of contractual risks.</p> <ul style="list-style-type: none"> • Interpret financial, technical and performance data relating to the performance of contracts including contract administration. • Discuss the responsibilities for contract management including procurement or non-procurement role, contract implementation plans and on-going demand management, planning and governance for contract management and resources required for contract management. • Outline the main responsibilities related to contract management including performance management and ensuring compliance to agreed standards, payment, risk assessment and relationship management.
Main techniques for the management of contracts and suppliers	<ul style="list-style-type: none"> • Compare contract management and supplier relationship management including definitions and management of individual contracts compared to the management of relationships with suppliers. • Explain the main techniques for supplier relationship management including supplier selection, team selection and responsibility for supplier improvement, supplier performance measurement and creating targets and assessment of performance. • Explain the main techniques for supplier development including approaches to supplier development, defining quality assurance and total quality and approaches to quality improvement. • Explain the techniques for relationship improvement including continuous improvement, the operation of balanced scorecards, relationship assessment methodologies and value stream mapping.

KM-08-KT02 Project management principles applied to supply chain planning and control (50%)	
Topic elements	Assessment Criteria
Principles of project management	<ul style="list-style-type: none"> • Explain the effective scheduling of resources to achieve project objectives in time and on budget. • Explain planning tools showing correct sequencing of tasks including Gantt chart, PERT charts and critical path methods
Application of a project management approach to order management	<ul style="list-style-type: none"> • Discuss where project management methodologies can be used to plan and control customer order activities. • Discuss how variations in actual performance to the planning assumptions can be managed.

Provider Programme Accreditation Criteria

Physical Requirements:

- Hand-outs, learning materials and resources

Human Resource Requirements:

- Facilitator should have at least a Level 6 qualification or proven experience of at least 3 years related to supply chain management
- Facilitator/learner ratio 1 to 25

Legal Requirements:

- None

Exemptions

- None