



German Jordanian University Deanship of Graduate Studies

M.Sc. in Logistics Management

(Thesis Track)

Study Plan Academic Year 2017/2018





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1.Introduction

Globalization is affecting almost every aspect of the world's economy – and the world's economy is sustained by global logistics.

Also, in the age of international interdependency among nations, the outsourcing phenomenon among companies, and economic transformation in developed countries to service and knowledge economy.

As a result, the demand for qualified logistics and supply chain professionals is higher than ever.

The field of logistics became a critical part of any business because a business cannot meet its strategic goals without having the supplies it needs to produce its goods given the mentioned drivers.

Businesses around the world are searching for new ways to increase their profits and improve the delivery of services, and so effectively storing, transporting and distributing materials is an important competitive advantage and revenue stream.

2. Program Objectives

The Masters in Logistics provides students with a coherent and principled framework and will equip students with the skills to critically understand current logistics practice in an increasingly dynamic business environment. The aim of the program:

PO1. To provide students with a solid foundation of the specialized terminology, theoretical concepts, and analytical skills in different functions of logistics and supply chain management.

PO2. To prepare high caliber professionals in logistics management and prepare them for the local and international job markets.

PO3. To build capacities in the field of logistics management to enhance professional practices and academic research according to the various industrial needs.

PO4. To equip students with different approaches to improve efficiency and robustness of large logistics systems.



PO5. To develop students' capabilities in designing sustainable logistics and supply chain networks.

PO6. To improve students' decision-making skills and problem-solving abilities using scientific methods.

3. Learning Outcomes

A successful completion of the M.Sc. in Logistics Management program enables students to:

- **LO1.** Develop a thorough understanding of the important role, trends, practices and theories of logistics management in today's business environment utilizing case problems.
- LO2. Become familiar with specialized functions of logistics management including transportation, distribution, warehousing, inventory and procurement.
- LO3. Learn to use optimization tools in designing supply networks and to apply data analysis techniques.
- LO4. Develop and utilize critical management skills such as negotiating, working effectively within a diverse business environment, ethical decision making and use of accounting information.
- **LO5.** Demonstrate the use of effective written and oral communications, critical thinking, team building and presentation skills as applied to business problems.
- **LO6.** Conduct scientific research that addresses a contemporary issue or problem related to logistics fields concluding with a written and oral presentation of the findings.

4. Enrollment

- A bachelor degree in a regular study program from a recognized university with a minimum GPA of 'Good'.
- The student must have a bachelor's degree from a program with an equivalent workload of at least 210 ECTS.
- English language proficiency proof through passing the National English Language Test with a minimum score of 50% or TOEFL iBT with a minimum score of 32 or equivalent.
- The priority will be for applicants with a bachelor degree in Business or Engineering majors.
- The priority will be for applicants with relevant practical experience.





Degree requirements

Students must complete the following requirements to obtain the Master's degree in Logistics Management:

1. Compulsory courses: (21 Credit hours/ 49 ECTS*)

Course No.	Course Title	Credit Hours	ECTS*	Pre-requisite
LOGS 711	Applied Data Analysis	3	7	~~~~~ *
LOGS 712	Production & Operations Management	3	7	~~~~~ *
LOGS 721	Logistics and Supply Chain Management	3	7	~~~~~ *
LOGS 722	Sourcing & Procurement Management	3	7	LOGS 721
LOGS 723	Transportation & Distribution Management	3	7	LOGS 721
LOGS 724	Warehousing & Inventory Management	3	7	LOGS 721
LOGS 732	Supply Network Design and Optimization	3	7	LOGS 721

^{*} One ECTS credit point equals 25-time hours.

2. Elective courses (6 credit hours/ 14 ECTS):

Course No.	Course Title	Credit Hours	ECTS	Pre-requisite
LOGS 713	Managerial Accounting for Logistics	3	7	~~~~~
LOGS 734	Global Logistics & Supply Chain Management	3	7	LOGS 721
LOGS 741	Maritime Logistics	3	7	LOGS 732
LOGS 742	Sustainable Logistics	3	7	LOGS 732
LOGS 743	Humanitarian Logistics	3	7	LOGS 732
LOGS 751	Special Topics in Logistics	3	7	LOGS 732
LOGS 752	Textile supply chain management	3	7	LOGS 732
LOGS 753	Supply chain management for SMEs	3	7	LOGS 732
LOGS 754	Project Management	3	7	LOGS 732

3. Thesis (9 credit hours): 27 ECTS

Course No.	Course Title	Credit Hours	ECTS	Pre-requisite
LOGS 799	Master Thesis	9	27	Department
				Approval

^{*}Must be passed by students with acceptable GPA, and must take in the first semester with GPA of 75%





4. Courses Description

LOGS 711: Applied Data Analysis (3 Credit Hours/7ECTS)

This course covers quantitative models and statistical methods for decision-making and data analysis. It considers the topics of: hypothesis testing, regression and correlation analysis, forecasting techniques, linear programming, decision analysis, and project management.

LOGS 712: Production & Operations Management (3 Credit Hours/7ECTS) This course is designed to introduce the students to the concepts, principles and practices in the field of operations management and its relationships with other functions in an organization. In addition, this course attempts to provide techniques required for the effective management of operations in both service and manufacturing

organizations. Students will have substantial benefit from understanding the role of operations management in organizations.

LOGS 721: Logistics and Supply Chain Management (3Credit Hours/7ECTS)

The focus of this course is on supply chain management. Topics include the evolution and objective of supply chain management; the major stages and processes involved in planning and managing supply chains; and why the concept of strategic fit is so important to supply chain managers. Successful students will also understand the major drivers of supply chain performance; key metrics for managing performance; and how to plan and forecast demand under conditions of uncertainty to meet desired customer service levels. This course also addresses the purpose and content of the Supply Chain Operations Reference (SCOR) Model. Case studies and problems are used throughout the course to highlight important principles and best practices in supply chain management.



LOGS 722: Sourcing & Procurement Management (3 Credit Hours/7ECTS) This course addresses the critical role of purchasing in logistics and supply chain management. The course begins with a review of the basic components of purchasing followed by a discussion of the role of purchasing in the supply chain and how it contributes to the strategy and profitability of the enterprise. The course also addresses the legal aspects of purchasing and the relationship between purchasing and inventory management, materials management, just-in-time manufacturing, and manufacturing resource planning. In addition, this course covers the issues of contract management, negotiation, and supplier relationship management. It covers contract management from both sellers and buyer's perspectives. It also discusses bid and proposal preparations, contracting, negotiation skills, and dispute resolution.

LOGS 723: Transportation & Distribution Management (3 Credit Hours/7ECTS)

Transportation plays a key role in today's global economy. The focus of this course is on understanding the technical, operational, and economic characteristics of the different freight and package transportation modes and their application in integrated physical distribution systems. This course addresses regional, national, and international passenger - transportation and explores the impact of the different transportation modes, transportation intermediaries, and intermodality on small package, freight, and passenger systems. The course also addresses national and international regulatory constraints and their impact on passenger transportation and global supply chain management. Additional topics include carrier and shipper strategies; alliance management and the use of third parties; transportation metrics; transportation security; and the role of information technology in modern transportation management.

LOGS 724: Warehousing & Inventory Management (3 Credit Hours/7ECTS) This course covers two Topics. The inventory part aims to introduce the students to the fundamental nature of inventory from a financial, physical, forecasting, and operational standpoint. The ultimate goal of this course is to present immediately usable information in the areas of forecasting,





physical control and layout, and problem recognition and resolution. The warehouse part is designed to help students to understand warehouse functions, processes, organization and operations. It includes analysis of warehouse location, operation, management, controls, procedures, finance, security, cargo/materials handling, and productivity.

LOGS 732: Supply Network Design and Optimization (3Credit Hours/7ECTS)

This module examines the key issues that companies must address in designing a supply network and the theories underpinning this; the practice of supply network design and optimization; as well as awareness of the tradeoffs involved in the optimization of logistical networks. Optimized supply network leads to minimum total system costs and hence enhance profitability and competitiveness. It outlines the essential concepts to understand the different types of supply chains and discusses how different supply chains can be designed for different products.

LOGS 741: Maritime Logistics (3 Credit Hours/7ECTS)

This course provides students with an understanding of the maritime industry. It starts with an introduction to the history maritime industry, the maritime geography and the role of maritime transportation in facilitating international commerce. This course also covers the concept of shipping, and some of the technical and operational aspects of shipping management. In addition, the fundamental legal framework for international maritime trade and shipment will be considered.

LOGS 742: Sustainable Logistics (3 Credit Hours/7ECTS)

This course is designed to enhance students' understanding of sustainability in logistics from the economic, environment, and social perspectives. The topics to be covered include: green logistics and green supply chains; green transportation and packaging; supply chain audit; carbon footprint; and laws and regulations related to logistics and supply chain management. In addition, the topics of sustainable purchasing and - procurement, sustainable warehouse and storage, and sustainable supply





chains will be considered. The reverse logistics system will be a crucial concept through different parts of the course.

LOGS 743: Humanitarian Logistics (3 Credit Hours/7ECTS)

Humanitarian logistics is the management and execution of the activities needed to plan for and move relief materials and supplies, along with related funds and information, from suppliers to beneficiaries. Logistics activities include needs assessment, planning, procurement, transport, warehousing, distribution to beneficiaries, and reporting. Effective, timely logistics is critical to response to emergencies arising from armed conflicts, epidemics, famine, and natural disasters. This course provides an overview of humanitarian logistics by introducing the challenging context in which it takes place, the organizations typically involved, the products and services needed, and the operational approaches taken and challenges encountered in meeting the needs. Issues covered include operational challenges, funding issues, coordination and strengthening local capacity. The course combines lectures, readings and teaching cases covering organizations such as IFRC, UNICEF and MSF.

LOGS 751: Special Topics in Logistics (3 Credit Hours/7ECTS)

This course considers new trends in supply chain management and innovative tools and techniques in logistics. New topics and influential scientific articles in logistics and supply chain management will be an essential part of this course. Special effort will be focused on enhancing students' abilities to provide contributions in the topics discussed through individual or group research projects.

LOGS 752 Textile Supply Chain Management (3 Credit Hours 7ECTS/7ECTS)

This course focuses on the textile industry in which efficient and effective supply chains plays a crucial role in enhancing profitability and competitiveness. The agility and flexibility needed in this sector require the highest level of responsiveness in the supply chain. This course will focus





on the nature of the textile industry in term of demand -characteristics, market trends, supply management, and product design and change.

LOGS 753 Supply Chain Management for SMEs (3 Credit Hours/7ECTS) This course focuses on managing supply chains in the small and medium-sized enterprises. The SMEs constitute a vital part of the local and global economies. The topics will be considered during this course focuses on enhancing profitability and reducing costs for SMEs through more integration on the supply chains and higher efficiencies in logistics. In addition, the SMEs' purchasing practices, the distribution channels used by SMEs, and the synchronization of inbound and outbound logistics activities will be considered.

LOGS 754: Project Management (3 Credit Hours/7ECTS)

This course focuses on concepts and methodologies of project management, procedures and techniques used in panning, monitoring and controlling projects. Topics included definitions and types of projects, project selection criteria, managers' selection criteria, planning and budgeting, SWOT analysis, and termination projects duration.

LOGS 713: Managerial Accounting for Logistics (3 Credit Hours/7CTS) The course covers the fundamentals of managerial accounting and its interfaces with logistics and supply chain management activities. It covers some practices and methods in support of planning, decision-making, and control. The course introduces cost terms and the use of accounting



information in planning and control decisions. It presents the managerial accounting tools related to logistics and supply chain such as cost-volume- profit analysis, comprehensive budgeting, and relevant costs related to nonrecurring decisions, responsibility accounting, and performance evaluation. It also covers capital budgeting, and concludes with a discussion of strategic management accounting techniques in the context of logistics and supply chain management.

LOGS 734: Global Logistics & Supply Chain Management (3 Credit Hours/7ECTS)

Today, globalization is affecting almost every aspect of the world's economy - and the world's economy is sustained by global logistics. The focus of this course is on understanding the role of logistics and supply chain management in meeting the needs of the transnational enterprise, from the sourcing of raw materials through delivery of the finished product to the final customer. The course addresses the role and scope of logistics in the global economy; key strategies for supporting different market entry alternatives; the impact of different transportation modes on international supply chain management; the use of international commerce terms and contracts; the impact of exchange rates on supply chain profitability; supply chain security; and the role of global supply chain management as a key source of competitive advantage. A number of case studies are also analyzed throughout the course to highlight important principles and best practices in global logistics and supply chain management.





5. Tuition and fees

The following table gives a breakdown of tuition and fees at GJU:

Fees	Jordan Dinars
Credit hour fee	200
Other Fees	
Admission/Acceptance Fees	120
Refundable Collateral Fees	150
Registration Fees\ per semester	120
Computer Fees\ per semester	60
Medical Insurance Fee\ per semester	50

6. Contact information

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