

MSOM 651: Transportation, Distribution, and Logistics Management

Prerequisite(s): None

Credits: 3



I. Course Description

Students in this course examine the critically important areas of transportation, distribution, and logistics and how they relate to overall supply chain management. Current domestic and global transportation, distribution, and logistics concepts, tools, and trends are covered. Specific topics include transportation modes (truck, rail, air, & ship), transportation regulations, transportation costing, logistics planning, cross-docking, pull production, lean, and risk management. The course combines theory and application to provide an up-to-date, practical learning opportunity that focuses on the needs of modern managers and professionals in an age of global competition and rapid technological change. Character and operational excellence principles related to management activities are also explored and applied.

II. Course Objectives

At the end of this course, students should be able to demonstrate the ability to:

1. Describe a framework and foundation for the role of transportation from a micro and macro perspective in supply chains.
2. Identify the theoretical and managerial dimensions of transportation in supply chains, including regulation and public policy.
3. Describe and examine operating and service characteristics, cost structure, and current challenges and issues of motor carrier, rail, air, and bulk (water and pipeline) transportation.
4. Identify the primary categories of transportation risk and apply processes and techniques for effectively managing risk.
5. Recognize the importance of global transportation planning and execution with respect to lead time, equipment choices, costs, packaging, documentation, insurance, risk, and communication.
6. Describe and analyze key aspects of transportation management including third party logistics, outsourcing, private transportation, and modern-day issues.
7. Apply, analyze, and evaluate character principles as they relate to management activities.

8. Apply, analyze, and evaluate operational excellence principles and tools as they relate to management activities.

III. Course Textbooks and Reading Materials

NOTE: Students must purchase in advance texts and/or materials for this course.

Transportation: A Supply Chain Perspective, 7th Edition

John J. Coyle, Robert A. Novack, Brian J. Gibson, & Edward J. Bardi

South-Western Cengage Learning

ISBN: 9780324789195

Management by Proverbs: Scriptural Wisdom for Superior Results

Michael A. Zigarelli

9 to 5 Media

ISBN: 978-0578718217

Published: July 2020

IV. Weekly Information

Module One – Week 1

Transportation as a Critical Link

Objectives

At the end of this Module, you should be able to:

- 1.1 Discuss the changing global landscape for businesses and other organizations and the external forces that are driving change in the global economy.
- 1.2 Recognize the special nature of transportation demand and the influence of transportation on companies and their supply chains operating in a global economy.
- 1.3 Identify the challenge of developing appropriate metrics for transportation output.
- 1.4 Apply the economic concept of price elasticity as it relates to transportation demand.
- 1.5 Explain the concept of derived demand as it applies to transportation.
- 1.6 Illustrate how transportation service adds value to a product.
- 1.7 Appraise the importance of the components of transportation service that relate to the movement of freight and their impact upon supply chain costs.
- 1.8 Recognize how transportation affects the development of economic activity for companies and other organizations.
- 1.9 Explain the development of supply chain management and the importance of transportation to supply chains.

- 1.10 Explain the importance of transportation to the economic vitality of countries or regions.
- 1.11 Describe the role and contributions of transportation systems to the economic development of countries or regions
- 1.12 Explain the historical role of transportation from an economic, social, and political perspective.
- 1.13 Explain and analyze the impact that improved transportation has upon land values.
- 1.14 Estimate how transportation affects the price of goods and services.
- 1.15 Examine the function and scope of transportation in advanced and developed economies.

Reading

Read in your textbook, *Transportation: A Supply Chain Perspective*:

Chapter 1: Transportation as a Critical Link in the Supply Chain

Chapter 2: Transportation as a Critical Link in the Economy

Lecture

Chapters 1 & 2

Deliverables

Discussion: Introduction

Discussion: Flexibility

Case Study: Clearfield Cheese Company

Test your understanding questions (not graded)

Module Two – Week 2

Transportation Regulation and Pricing

Objectives

At the end of this Module, you should be able to:

- 2.1 Explain the bases for the regulation of transportation in the United States.
- 2.2 Describe the roles of regulatory agencies of regulatory agencies and the courts in regulating transportation.
- 2.3 Recognize previous and current safety and security regulations affecting transportation.
- 2.4 Explain the need for a national transportation policy.
- 2.5 Identify and assess the need and roles of public promotion in transportation.
- 2.6 Describe the role of user charges.
- 2.7 Explain the relationship between a rate and a price.

- 2.8 Describe the various types of market structures found in the transportation industry.
- 2.9 Explain the impact of transportation prices on the relevant market area for a product.
- 2.10 Explain the differences between cost of service and value of service pricing.
- 2.11 Identify the different forms of rates used in transportation.
- 2.12 Describe how transportation rates have changed under deregulation.
- 2.13 Illustrate the strategic role of pricing for transportation firms.
- 2.14 Calculate the costs of both truckload and less-than-truckload freight moves.

Reading

Read in your textbook, *Transportation: A Supply Chain Perspective*:

Chapter 3: Transportation Regulation and Public Policy

Chapter 4: Costing and Pricing for Transportation

Lecture

Chapters 3 & 4

Deliverables

Discussion: Honesty

Case Study: Who Pays the Price?

Course Project: Part 1

Test your understanding questions (not graded)

Module Three – Week 3

Transportation Modes – Part 1

Objectives

At the end of this Module, you should be able to:

- 3.1 Describe the development of motor carriers and their contributions to the U.S. economy.
- 3.2 Identify the different types of firms in the motor carrier industry.
- 3.3 Recognize the market forces shaping the motor carrier industry.
- 3.4 Describe the service characteristics of motor carriers.
- 3.5 Identify the different types of vehicles and terminals used in the motor carrier industry.
- 3.6 Describe and calculate the impact of fuel and labor on the motor carrier cost structure.
- 3.7 Identify the current issues facing the motor carrier industry.

- 3.8 Describe the contributions of the railroad industry to the development of the U.S. economy.
- 3.9 Identify the size and types of firms in the railroad industry.
- 3.10 Discuss the relevance of intermodal and intramodal competition in the railroad industry.
- 3.11 Identify the major types of commodities hauled by the railroads.
- 3.12 Recognize the different types of equipment used in the railroad industry.
- 3.13 Discuss the nature of costs in the railroad industry and how they impact pricing decisions.
- 3.14 Explain the importance of intermodal carloadings to the growth of the railroad industry.
- 3.15 Identify the current issues facing the railroad industry.

Reading

Read in your textbook, *Transportation: A Supply Chain Perspective*:

Chapter 5: Motor Carriers

Chapter 6: Railroads

Read Principles 8 and 9 in *Management by Proverbs*

Lecture

Chapters 5 & 6

Deliverables

Discussion: Continuous Improvement

Case Study: Squire Transportation

Test your understanding questions (not graded)

Module Four – Week 4

Transportation Modes – Part 2

Objectives

At the end of this Module, you should be able to:

- 4.1 Describe the importance of air transportation in the U.S. economy
- 4.2 Identify the types and number of carriers in the U.S. airline industry.
- 4.3 Describe the level of competition in the U.S. airline industry.
- 4.4 Recognize the operating and service characteristics of airline transportation.
- 4.5 Identify the different types of equipment used by airlines.
- 4.6 Explain the impacts of fuel and labor costs on airline cost structures.

- 4.7 Recognize and assess the concepts of economies of scale and density in the airline industry.
- 4.8 Identify the current issues facing the airline industry.
- 4.9 Describe the importance of domestic waterways in the development of the economy of the U.S. and particularly of cities located near waterways.
- 4.10 Discuss the role and significance of the water carrier industry at the present time in the U.S. economy and how it complements and competes with the other basic modes of transportation.
- 4.11 Identify the various types of water carriers and their roles in the overall water carrier system.
- 4.12 Demonstrate an understanding of the service and operating characteristics of water carriers and pipelines as well as their cost structures and equipment challenges.
- 4.13 Identify the types of pipeline companies and their role in the transportation system.

Reading

Read in your textbook, *Transportation: A Supply Chain Perspective*:

Chapter 7: Airlines

Chapter 8: Water Carriers and Pipelines

Read the case study in (Creating a Career Plan) of *Management by Proverbs*

Lecture

Chapters 7 & 8

Deliverables

Discussion: Creating a Career Plan

Case Study: Great Lakes Carriers

Course Project – Part 2

Test your understanding questions (not graded)

Module Five – Week 5

Risk Management

Objectives

At the end of this Module, you should be able to:

- 5.1 Recognize the nature of transportation risk and disruptions.
- 5.2 Explain the concept of risk management.
- 5.3 Describe the process for mitigating transportation risk.
- 5.4 Identify the primary categories and types of transportation risk.

- 5.5 Describe and apply the key factors in risk assessment.
- 5.6 Outline the four techniques for managing transportation risk.
- 5.7 Examine the challenge of balancing transportation security and global trade efficiency.
- 5.8 Recognize key transportation security regulations and initiatives.

Reading

Read in your textbook, *Transportation: A Supply Chain Perspective*:
Chapter 9: Transportation Risk Management

Lecture

Chapter 9

Deliverables

Discussion: Humility in Leadership
Case Study: Tiger Golf
Test your understanding questions (not graded)

Module Six – Week 6

Global Transportation

Objectives

At the end of this Module, you should be able to:

- 6.1 Discuss the relationship between international trade and global transportation.
- 6.2 Identify the three critical flows in global supply chains.
- 6.3 Recognize the importance of proper global transportation planning and execution.
- 6.4 Describe the role of Incoterms in determining transportation responsibilities, risk, and costs.
- 6.5 Identify the payment term options available to exporters and importers.
- 6.6 Recognize the value of timely, accurate global freight documentation.
- 6.7 Analyze the key issues in effective international transportation mode and carrier selection.
- 6.8 Evaluate the critical factors in route design for international shipments.
- 6.9 Recognize the importance of intermodal service in global transportation execution.
- 6.10 Describe the intermodal options available to global transportation managers.
- 6.11 Discuss the importance of proper freight packing, documentation, and insurance.

- 6.12 Describe the government's role in safe and secure global transportation operations.
- 6.13 Discuss ocean and air transportation services, equipment options, and rate structures.
- 6.14 Outline the role of ancillary service providers in facilitating global freight flows.
- 6.15 Define the critical roles played by seaports and airports in the global supply chain.
- 6.16 Describe the customs clearance process for import goods.

Reading

Read in your textbook, *Transportation: A Supply Chain Perspective*:

Chapter 10: Global Transportation Planning

Chapter 11: Global Transportation Execution

Lecture

Chapters 10 & 11

Deliverables

Discussion: Value Stream Mapping and Lean Thinking

Case Study: Where There's Smoke. . .

Test your understanding questions (not graded)

Module Seven – Week 7

Transportation Management

Objectives

At the end of this Module, you should be able to:

- 7.1 Describe the concept of third party logistics and its role in the movement of goods.
- 7.2 Identify the different types of third party logistics service providers.
- 7.3 Describe the four types of transportation activities that are outsourced.
- 7.4 Discuss the reasons why companies seek integrated third party logistics services.
- 7.5 Summarize the process for outsourcing transportation and logistics activities.
- 7.6 Recognize the importance of information technology in managing outsourced activities.
- 7.7 Explain and define private transportation from a legal and practical perspective.
- 7.8 Discuss the advantages and disadvantages of private trucking.

- 7.9 Analyze the cost structure of private trucking and recognize the various components of fixed and variable (operating) costs.
- 7.10 Calculate driver and equipment costs for private carriage.
- 7.11 Discuss the role of leasing equipment for private transportation.
- 7.12 Describe the challenges and issues associated with regulations pertaining to private trucking.
- 7.13 Discuss the growing concern about U.S. transport capacity and the transport infrastructure needed to support global trade
- 7.14 Describe the role and objectives of the SmartWay Transport Program sponsored by the U.S. Environmental Protection Agency.
- 7.15 Recognize the opportunities that transport carriers will have to improve supply chain performance through proactive collaboration and technology.

Reading

Read in your textbook, *Transportation: A Supply Chain Perspective*

Chapter 12: Third Party Logistics

Chapter 13: Private Transportation and Fleet Management

Chapter 14: Issues and Challenges of Global Supply

Lecture

Chapters 12, 13 & 14

Deliverables

Discussion: Creativity, Communication, and Collaboration

Course Project: Part 3

Final Exam

V. Course Information and Grading

Course Requirements (Weekly)

Each Module will be based on the inclusion and grading of the following segments:
Discussion Boards/ Assignments/ Quizzes.

Class Discussions

Successful online learning requires active and meaningful participation in the Discussion Board Forum. Critical thinking, appropriate use of judgment and professional comments are required for all responses. Simple agreement or disagreement with a fellow student does not constitute a quality response. Student opinions are important but must be supported by relevant data obtained in the literature or text.

1. One initial discussion board post is due by the fourth day (Thursday @ 11:59 pm) of each weekly module and two response posts are due by the last day (Sunday @ 11:59 pm) of each weekly module.
 - a. Undergraduate Word Count Requirements:
 - i. Initial post must be >200 words
 - ii. Responses must be >150 words
 - b. Graduate Word Count Requirements:
 - i. Initial post must be >250 words
 - ii. Responses must be >200 words
2. Participation – Students must meet initial and response post deadlines to be eligible for full points. Late initial posts may be accepted with a 33% reduction in the overall score assessed for each day late. Two response posts are required. If only one is received, then the overall score will be reduced by 25%. If no response posts are received, then the overall score will be reduced by 50%.
3. Students should be respectful and write in a proper and professional manner.

Please refer to the Discussion Board Rubric located within course syllabus for specific requirements and guidance on delivering a substantial discussion.

Late and Make-up Assignments

All deliverables are due by 11:59 PM on the due dates indicated. When substantive emergencies occur, acceptance of late submissions is left to the discretion of the course instructor.

Assignments that are submitted after the due date with prior written approval (text or email) from the instructor may receive the following deductions:

1. Late assignments are subject to a deduction of 10% of the available points for each day late.
2. Assignments submitted later than one week after due date will not be accepted and will receive a zero (0).
3. No work may be submitted after the last day of the course.
4. See Class Discussions for late discussion post policy.

Written Work

- All graded assignments must be typewritten, as designated by the professor of record for the course.

- All referenced materials must be presented according to the Publication Manual of the American Psychological Association (APA), based on the most current published edition. (current, 7th edition) (Except for English courses that specify use of MLA format.)
- All required written assignments are due on the last night of each lesson week at 11:59pm EST. This information is included in the course scheduler and calendar of every course.
- All written and graded assignments are considered the property of the College of Adult and Professional Studies and should be returned to the appropriate professor of record for the related course.
- SafeAssign may be used to check for plagiarism.

Grading Scale and Assigned Letter Grades

Charleston Southern Online Graduate classes follow the following numerical and letter grading scale. Grades will be posted by the Sunday night following the closing of the Module. No grades will be given to students over the phone.

A = 93-100

B+=90-92

B = 83-89

C = 75-82

F = Below 75

Undergraduate Discussion Board Rubric – Introduction (First week only)

Criteria	Minimal	Effective
Percent Possible: 0 or 50 Initial Post Introduction.	Percent Possible: 0 No post or did not follow instructions at all.	Percent Possible: 50 Posted following instructions.
Percent Possible: 0 or 50 Response Posts Welcome.	Percent Possible: 0 No post or did not follow instructions at all.	Percent Possible: 50 Posted following instructions.

Discussion Board Initial Post Rubric – Undergraduate

Initial Post Rubric	Content	Support & References	Mechanics & Length
Mastery 90-100%	<ul style="list-style-type: none"> • Relevant and thought-provoking viewpoints • Innovative and indicates a high level of thought • High level of critical thought, analysis, and application of concepts and ideas 	<ul style="list-style-type: none"> • Student cites 2 peer-reviewed sources in the body of the posts • Proper APA format 	<ul style="list-style-type: none"> • Post exceeds 200 words • Very well written
Effective 80-89%	<ul style="list-style-type: none"> • Advances the discussion and body of knowledge providing relevant, original thoughts to the question • Conveys thoughts in a well-rounded manner that show understanding, critical thought, and application of concepts 	<ul style="list-style-type: none"> • Student cites 2 peer-reviewed sources in the body of the post • Not in appropriate APA format 	<ul style="list-style-type: none"> • Post 178-200 words • Well written
Competent 70-79%	<ul style="list-style-type: none"> • Makes mostly complete response to the questions • Mostly restatement of materials • Conveys thoughts adequately; however, need to further develop critical aspects 	<ul style="list-style-type: none"> • Student cites 1 peer-reviewed source. • Not in appropriate APA format 	<ul style="list-style-type: none"> • Post is 158-178 words • A few writing errors
Minimal 0-69%	<ul style="list-style-type: none"> • Provides weak contribution to the discussion board • Does not convey concept understanding 	<ul style="list-style-type: none"> • Does not cite any peer-reviewed sources 	<ul style="list-style-type: none"> • Post is less than 158 words • Poorly written • 0 points for posts submitted

Initial Post Rubric	Content	Support & References	Mechanics & Length
	<ul style="list-style-type: none"> Shows evidence of critical thought but is not concise or complete 	<ul style="list-style-type: none"> Addresses questions in a manner that is unclear Not appropriate APA format 	after 11:59 PM EST on Thursday

Discussion Board Peer Response Rubric – Undergraduate

Peer Response Rubric	Content	Support & References	Mechanics & Length
Mastery 90-100%	<ul style="list-style-type: none"> Advances discussion providing additional commentary that is relevant or offers an alternative Critical thought development is evidenced by thoughtful and meaningful responses Source is relevant and published in last 3 years 	<ul style="list-style-type: none"> Student cites 2 peer-reviewed sources in the body of the posts Proper APA format 	<ul style="list-style-type: none"> Post exceeds 150 words Very well written
Effective 80-89%	<ul style="list-style-type: none"> Advances discussion providing additional commentary and critique Responses are correct but mostly restate the peers' viewpoints without development of critical thought Source is relevant and published in last 3 years 	<ul style="list-style-type: none"> Student cites 1 peer-reviewed source Not in appropriate APA format 	<ul style="list-style-type: none"> Post is 133-150 words Well written
Competent 70-79%	<ul style="list-style-type: none"> Shows adequate understanding of the knowledge and concepts posted by peers Responses are mostly, "I agree..." Source is somewhat relevant and published in last 5 years 	<ul style="list-style-type: none"> Student cites 1 peer-reviewed source Not in appropriate APA format 	<ul style="list-style-type: none"> Post is 118-132 words A few writing errors.
Minimal 0-69%	<ul style="list-style-type: none"> Shows minor comprehension of concepts and viewpoints from peers. Responses are vague and do not show understanding or comprehension 	<ul style="list-style-type: none"> Does not cite any peer-reviewed sources Not appropriate APA format 	<ul style="list-style-type: none"> Post 0-118 words Poorly written 0 points for posts submitted after 11:59 PM EST on Sunday

Assignment/Case Study/Course Project Rubric

Assignment Rubric	Critical Thinking	References & Organization
Mastery 90-100%	<ul style="list-style-type: none"> • Relevant use of vocabulary throughout • Demonstrates superior knowledge of concepts and theories • Addresses problem/issue directly • Demonstrates active critical thinking relevant to problem identification and effective solutions 	<ul style="list-style-type: none"> • Professional writing structure. • Well-organized response. • Student cites appropriate, current peer-reviewed sources • Proper APA format • Exceeds 500 words
Effective 80-89%	<ul style="list-style-type: none"> • Demonstrates satisfactory understanding • Lacks answer to all questions/full scenario • Demonstrates some knowledge of content and professional vocabulary • Content needs additional focus for innovative responses other than restatement of text. 	<ul style="list-style-type: none"> • Student cites some relevant, current peer-reviewed sources. • Follows directions • APA formatting demonstrated but not extensive. • 450-500 words
Competent 70-79%	<ul style="list-style-type: none"> • Inconsistent comprehension • Marginal responses • Content, concepts, ideas/responses are not fully developed 	<ul style="list-style-type: none"> • Sources are outdated or ineffective. • Lacks focus on content • Unorganized • Some writing errors • Not in appropriate APA format. • 400-449 words
Minimal 0-69%	<ul style="list-style-type: none"> • Consistently below expectations • Lacks significant details of the assignment • Lacks critical thought, analysis, and application. • Partially addresses the topic 	<ul style="list-style-type: none"> • Does not cite any peer-reviewed sources • Not appropriate APA format • 0-399 words • Poorly written. • 0 points for late assignments