

SCMT 324: Transportation

Prerequisite(s): None

Credits: 3



I. Course Description

This course enables the student to delve into the vital field of Transportation and how it relates to the supply chain. Major areas of study include the evolution, philosophy, concepts, tools, and techniques associated with Transportation. Specific topics to be examined include the role and importance of transportation; transportation and economy; transportation and technology system; costing and pricing in transportation; motor carriers; railroad; airlines; water carriers and pipelines; third party logistics; transportation risk management; global transportation management; the government role in transportation; and issues and challenges of a global supply chain. 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 the role of transportation in the overall supply chain of the firm.
2. Explain the impact that transportation has on the economy both locally and global.
3. Identify and evaluate the key factors that make an effective transportation management system.
4. Identify and evaluate how to effectively price and cost the different modes of transportation.
5. Identify and evaluate comparative approaches such as third party logistics and mitigate transportation risks and disruptions.
6. Explain the role of government in the transportation system and mitigate issues/challenges of the global supply chain.
7. Integrate Christian principles with production decisions, including, but not limited to, hiring and firing decisions, layoffs, plant closings, etc.

III. Course Textbooks and Readings Materials

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

Novack A., Gibson B., Suzuki Y. & Coyle (2018). *Transportation: A global supply chain*

perspective, (9th ed.). Cengage South-Western. ISBN: 978-1-337-40664-2

Zigarelli M. A. (2008). *Management by Proverbs: Scriptural wisdom for superior results*.

Xulon Press. ISBN: 978-1-60791-017-6

IV. Weekly Information

Module One – Week 1

The Role and Importance of Transportation/Transportation and Economy

Objectives

At the end of this lesson, students should be able to:

- 1.1 Appreciate why efficient transportation systems are so critical to advance the growth and development of regions and countries, and how they contribute to social and political systems as well as national defense.
- 1.2 Discuss the importance of transportation to globalization and how it contributes to the effective flow of commerce among close and distant regions.
- 1.3 Recognize how global supply chains can contribute to the competitive position of countries and allow them to penetrate global markets
- 1.4 Appreciate the dynamic nature of the global economy, which can impact and change the competitive position of a region or country in a relatively short period of time.
- 1.5 Explain the underlying economic basis for international exchange of goods and services for the overall benefit of two or more countries or regions and gain some perspective on the volume and overall importance of the more advanced countries of the world
- 1.6 Discuss the size and age distribution of the population and the growth rate of the major countries of the world and understand how the size of the population can impact a country positively or negatively.
- 1.7 Recognize the challenges and opportunities associated with the worldwide growth in urbanization and why there has been such a major shift from rural to urban areas.
- 1.8 Appreciate the importance and impact of land and resources to the economic advancement and development of the various countries of the world and how they can be exploited to their advantage.
- 1.9 Explain why technology has become such an important ingredient for the economic progress of companies and countries in today's global economy and understand the need for and types of technology.
- 1.10 Discuss the overall characteristics and importance of globalization and supply chains in the highly competitive world economies of the 21st century.
- 1.11 Recognize the importance of transportation to the economic vitality of the United States and countries or regions and why transportation is probably our most important industry.
- 1.12 Appreciate the role and contributions of transportation systems to the economic development of countries or regions.
- 1.13 Recognize how transportation of goods and people impacts the social and political dimensions of an economy or region.

- 1.14 Appreciate the historical role of transportation from an economic, social and political perspective.
- 1.15 Discuss the impact that improved transportation has upon land values and economic development.
- 1.16 Recognize how transportation affects the price of goods, services and market areas.
- 1.17 Appreciate the function and scope of transportation in advanced and developed economies.

Reading

- Read chapter 1 and 2 of the Novack A., Gibson B., Suzuki Y. & Coyle (2019). *Transportation: A global supply chain perspective*, (9th ed.).

Deliverables

- Two (2) Discussion board posts and responses – main posts due on Thursday and replies are due on Sunday
- Case Study – due Sunday
- Weekly Quiz/Test – due Sunday

Module Two – Week 2

Transportation and Technology System/Costing and Pricing in Transportation

Objectives

At the end of this lesson, students should be able to:

- 2.1 Appreciate the critical role of information in transportation management.
- 2.2 Explain transportation information requirements.
- 2.3 Describe the capabilities of transportation software.
- 2.4 Describe and differentiate between planning, execution, and performance management tools.
- 2.5 Articulate the benefits of transportation management systems.
- 2.6 Discuss the critical issues in technology selection and implementation.
- 2.7 Recognize the important role of equipment technology in transportation sustainability, safety, and cargo security.
- 2.8 Identify the disruptive technologies that will spur transportation service innovation.
- 2.9 Recognize the relationship between a rate and a price.
- 2.10 Be familiar with the various types of market structures found in the transportation industry.
- 2.11 Gain knowledge of the impact of transportation prices on the relevant market area for a product.
- 2.12 Be able to explain the differences between cost of service and value of service pricing.
- 2.13 Examine the different forms of rates used in transportation.
- 2.14 Appreciate how transportation rates have changed under deregulation.
- 2.15 Determine the strategic role of pricing for transportation firms.
- 2.16 Calculate the costs of both truckload and less-than-truckload freight moves.

Reading

- Read chapter 3 and 4 of the Novack A., Gibson B., Suzuki Y. & Coyle (2019). *Transportation: A global supply chain perspective*, (9th ed.).
- Read Principles 11 and 12 in Part 3 of the Zigarelli M. A. (2008). *Management by Proverbs: Scriptural wisdom for superior results*.

Deliverables

- Discussion board post and responses– main posts due on Thursday and replies are due on Sunday
- Case Study – due Sunday
- Weekly Quiz/Test – due Sunday

Module Three – Week 3

Motor Carriers/Railroads

Objectives

At the end of this lesson, students should be able to:

- 3.1 Examine the development of motor carriers and their contributions to the U.S. economy.
- 3.2 Be familiar with the different types of firms in the motor carrier industry.
- 3.3 Appreciate the market forces shaping the motor carrier industry.
- 3.4 Gain knowledge of the service characteristics of motor carriers.
- 3.5 Identify the different types of vehicles and terminals used in the motor carrier industry.
- 3.6 Understand the impacts of fuel and labor on the motor carrier cost structure.
- 3.7 Be aware of current issues facing the motor carrier industry.
- 3.8 Appreciate the contributions of the railroad industry to the development of the U.S. economy.
- 3.9 Gain an understanding of 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 Know 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 Recognize the importance of intermodal carloadings on the growth of the railroad industry.
- 3.15 Be aware of the current issues facing the railroad industry today.

Reading

- Read chapter 5 and 6 of the Novack A., Gibson B., Suzuki Y. & Coyle (2019). *Transportation: A global supply chain perspective, (9th ed.)*.
- Read Principles 13 and 14 in Part 3 of the Zigarelli M. A. (2008). *Management by Proverbs: Scriptural wisdom for superior results*.

Deliverables

- Discussion board post and responses– main posts due on Thursday and replies are due on Sunday
- Case Study – due Sunday
- Weekly Quiz/Test – due Sunday

Module Four – Week 4 **Airlines/Water Carriers and Pipelines**

Objectives

At the end of this lesson, students should be able to:

- 4.1 Gain knowledge of the types and number of carriers in the U.S. airline industry.
- 4.2 Recognize the level of competition in the U.S. airline industry.
- 4.3 Become aware of the operating and service characteristics of airline transportation.
- 4.4 Be familiar with the different types of equipment used by airlines.
- 4.5 Appreciate the impacts of fuel and labor costs on airlines cost structures.
- 4.6 Recognize the concepts of economies of scale and density in the airline industry.
- 4.7 Be aware of current issues facing airlines today.
- 4.8 Recognize the importance of domestic waterways in the development of the global economy as well as the economy of the United States.
- 4.9 Appreciate the role and significance of the water carrier industry to the global economy and the U.S. economy and how the water carrier industry complements and competes with the other basic modes of transportation.
- 4.10 Discuss the various types of water carriers and their role in the overall water carrier system.
- 4.11 Recognize the competitive environment for water carriers on an intra-modal as well as an inter-modal basis.
- 4.12 Discuss the service and operating characteristics of water carriers as well as their cost structure and equipment challenges.
- 4.13 Understand the current issues faced by the water carrier industry in the 21st century.
- 4.14 Appreciate the development and current position of the pipeline industry in the economy.
- 4.15 Discuss the types of pipeline companies and their role in the U.S. and global transportation systems.

- 4.16 Recognize the nature of the operating and service characteristics of pipeline carriers and what makes them unique in the transportation system.
- 4.17 Discuss the cost structure of pipelines and how it impacts their rates and service.

Reading

- Read chapter 7 and 8 of the Novack A., Gibson B., Suzuki Y. & Coyle (2019). *Transportation: A global supply chain perspective*, (9th ed.).

Deliverables

- Discussion board post and responses– main posts due on Thursday and replies are due on Sunday
- Case Study – due Sunday
- Weekly Quiz/Test – due Sunday

Module Five – Week 5

Third Party Logistics/Transportation Risk Management

Objectives

At the end of this lesson, students should be able to:

- 5.1 Recognize the concept of third party logistics and its role in the movement of goods.
- 5.2 Identify the different types of third party logistics service providers.
- 5.3 Describe the four types of transportation activities that are outsourced.
- 5.4 Discuss the reasons why companies seek integrated third party logistics services.
- 5.5 Recognize the size and scope of the third party logistic market.
- 5.6 Evaluate the reasons for outsourcing and the results achieved.
- 5.7 Summarize the process for outsourcing transportation and logistics activities.
- 5.8 Appreciate the current challenges and competitive issues in the third party logistics industry.
- 5.9 Recognize the importance of information technology in managing outsourced activities.
- 5.10 Recognize the nature of transportation risk and disruptions.
- 5.11 Explain the concept of risk management.
- 5.12 Identify the primary categories and types of transportation risk.
- 5.13 Describe the general process for managing transportation risk.
- 5.14 Recognize the key factors in risk assessment.
- 5.15 Discuss the four techniques for managing transportation risks.
- 5.16 Appreciate the challenge of balancing transportation security and global trade efficiency.

Reading

- Read chapter 9 and 10 of the Novack A., Gibson B., Suzuki Y. & Coyle (2019). *Transportation: A global supply chain perspective*, (9th ed.).

Deliverables

- Discussion board post and responses– main posts due on Thursday and replies are due on Sunday
- Case Study – due Sunday
- Weekly Quiz/Test – due Sunday

Module Six – Week 6

Global Transportation Management/Government Role in Transportation

Objectives

At the end of this lesson, students should be able to:

- 6.1 Discuss the relationship between international trade and global transportation.
- 6.2 Identify the three critical transportation processes in global supply chains.
- 6.3 Recognize the roles of Incoterms, insurance, and terms of payment in managing global transportation risks and costs.
- 6.4 Analyze the key issues in effective international transportation mode selection.
- 6.5 Recognize the unique capabilities of ocean, air, and intermodal transportation in moving freight globally.
- 6.6 Evaluate the critical factors in carrier selection and route design for international shipments.
- 6.7 Describe the need for proper packaging, ancillary service providers, and effective ports in delivery execution.
- 6.8 Appreciate the value of timely, accurate global freight documentation and visibility tools.
- 6.9 Articulate the customs clearance process for import goods.
- 6.10 Recognize the links among national transportation policy, transportation regulation, and public promotion of transportation.
- 6.11 Recognize the role and importance of national transportation policy.
- 6.12 Articulate the basis for the regulation of transportation in the United States.
- 6.13 Appreciate the regulatory roles of federal and state agencies and the courts.
- 6.14 Discuss the different types of transportation regulation.
- 6.15 Obtain a knowledge of past and current regulations affecting transportation.
- 6.16 Identify and assess the roles of public promotion in transportation.
- 6.17 Appreciate the role of user charges in funding transportation initiatives.

Reading

- Read chapter 11 and 12 of the Novack A., Gibson B., Suzuki Y. & Coyle (2019). *Transportation: A global supply chain perspective*, (9th ed.).

Deliverables

- Discussion board post and responses– main posts due on Thursday and replies are due on Sunday
- Case Study – due Sunday
- Weekly Quiz/Test – due Sunday

Module Seven – Week 7 **Issues and Challenges of Global Supply Chains**

Objectives

At the end of this lesson, students should be able to:

- 7.1 Appreciate the serious challenges and major issues faced by the current transportation system for driving continued domestic and global economic growth.
- 7.2 Recognize why and what factors contributed to the growth and prosperity that was experienced in recent years.
- 7.3 Discuss the economic and competitive challenges being caused by the decaying U.S. infrastructure and the threat to the economic viability of the major modes of transportation in the United States.
- 7.4 Gain a perspective on the critical role of government leadership and policy to resolve the crisis that exists for our global economy without capital funding for the U. S. transportation system.
- 7.5 Appreciate the crisis in the gap for supply chain talent, its causes, and solutions
- 7.6 Recognize why sustainability has become a major objective for businesses and especially for transportation and the potential positive benefit of proactive sustainability strategies.
- 7.7 Appreciate the impact of new energy sources for the global economy.
- 7.8 Discuss the role and objectives of the SmartWay Transport program sponsored by the U.S. Environmental Protection Agency.
- 7.9 Develop insights into the special challenges that transport companies will face in the 21st century with increased competition and changes in energy sources.
- 7.10 Recognize the opportunities that transportation carriers will have to improve overall supply chain performance through proactive collaboration and appropriate use of new technology.
- 7.11 Discuss how supply chain technology can help transport carriers to improve efficiency and effectiveness for their operations and for their customer's costs and service.

Reading

- Read chapter 13 of the Novack A., Gibson B., Suzuki Y. & Coyle (2019). *Transportation: A global supply chain perspective*, (9th ed.).

Deliverables

- Discussion board post and responses– main posts due on Thursday and replies are due on Sunday
- Case Study – due Sunday
- Weekly Quiz/Test – due Sunday

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/ Case Studies/ Projects.

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.
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. Assignments that are submitted after the due date without prior written approval (text or email) from the instructor will 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.

When substantive emergencies occur, acceptance of late submissions is left to the discretion of the course instructor.

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.

Policies

Academic support information is available under “CAPS Policies”

Grading Scale and Assigned Letter Grades

Charleston Southern Online Undergraduate 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 = 900 -1000 points

B+ = 870 -899 points

B = 800 – 869 points

C+ = 770 – 799 points

C = 700 – 769 points

D = 600 -699 points

F = <600 points

The following table shows the assignment types contained within this course and the assigned weighting used to determine the final course grade.

Activity Types	Weights (%)
Discussion Forums	30
Case Studies	52.5
Weekly Quiz/Test	17.5
Total	100

Discussion Board Rubric – Introduction (First week only: 20 Points)

Criteria	Minimal	Effective
Pts Possible: 0 or 10 Initial Post Introduction.	Pts Possible: 0 No post or did not follow instructions at all.	Pts Possible: 10 Posted following instructions.
Pts Possible: 0 or 10 Response Posts Welcome.	Pts Possible: 0 No post or did not follow instructions at all.	Pts Possible: 10 Posted following instructions.

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%.

Discussion Board Rubric (40 points possible)

Rubric Criteria	Minimal	Competent	Effective	Mastery
<p><i>Pts Possible: 0 - 20</i></p> <p>Initial Post</p> <p>Understanding:</p> <p>Discovers and conveys understanding through relevant discussion with peers. Relevant and proper business writing and critical thought development. Posts timely.</p> <p><i>A minimum of 2 peer-reviewed sources are cited in the post and listed in appropriate APA format at the end of the post.</i></p>	<p><i>Pts Possible: 0 - 5</i></p> <p>Student provides weak contribution to the discussion board. Addresses the questions in a manner that is unclear or does not convey concept understanding. Shows evidence of critical thought but is not concise or complete. Does not cite any peer-reviewed sources. <i>Post is less than 75 words.</i></p> <p>0 points if post is not submitted by 11:59 p.m. on Thursday.</p>	<p><i>Pts Possible: 6 - 10</i></p> <p>Student makes contribution by making a mostly complete response to the questions. The contribution is mostly restatement of materials. Student conveys thoughts adequately; however, needs to further develop critical aspects. Student cites 1 peer-reviewed source. Not in appropriate APA format. A few writing errors.</p> <p><i>Post has between 75 - 124 words.</i></p>	<p><i>Pts Possible: 11-15</i></p> <p>Student advances the discussion and body of knowledge providing relevant, original thoughts to the question. Student conveys thoughts in a well- rounded manner that shows understanding, critical thought and application of concepts. Student cites 2 peer-reviewed sources in the body of the post. Not APA format.</p> <p>Well written.</p> <p><i>Post has between 125 – 250 words.</i></p>	<p><i>Pts Possible:16-20</i></p> <p>Student provides relevant and thought-provoking viewpoints to the question. Post is innovative and indicates a high level of thought.</p> <p>Student writing shows a high level of critical thought, analysis and application of concepts and ideas. Student cites 2 peer-reviewed sources in the body of the post in proper APA format.</p> <p>Very well-written.</p> <p><i>Post exceeds 250 words.</i></p>
<p><i>Pts Possible: 0 - 20</i></p> <p>Response Posts</p> <p>Discovers key areas of knowledge and concepts from peers. Furthers the body of knowledge by</p>	<p><i>Pts Possible: 0 - 5</i></p> <p>Student shows minor comprehension of the concepts and viewpoints from peers. The responses are vague and do not show</p>	<p><i>Pts Possible: 6 - 10</i></p> <p>A student shows adequate understanding of the knowledge and concepts posted by peers. The responses are mostly “I agree...”</p>	<p><i>Pts Possible: 11-15</i></p> <p>Student advances the discussion providing additional commentary and critique. The responses are correct but mostly</p>	<p><i>Pts Possible: 16-20</i></p> <p>Student advances the discussion providing additional commentary that is relevant or offers an alternative.</p>

Rubric Criteria	Minimal	Competent	Effective	Mastery
<p>responding to peers' posts with relevant and thought-provoking comments. A <i>minimum of 1 peer-reviewed source is cited and listed in appropriate APA format at the end of each student response.</i></p> <p>0 points = no response posts.</p> <p>10 points = 1 response post.</p>	<p>understanding or integration. Poorly written. Does not cite any peer-reviewed sources.</p> <p><i>Post is less than 75 words.</i></p>	<p>Student cites 1 peer-reviewed source. Peer reviewed source was somewhat relevant and published within past 5 years.</p> <p><i>Post has between 75 - 124 words.</i></p>	<p>restate the peers' viewpoints without development of critical thought.</p> <p>Student cites 1 peer-reviewed source. Peer reviewed source is relevant and was published within past 3 years.</p> <p><i>Post has between 125- 200 words.</i></p>	<p>Critical thought development is evidenced by thoughtful and meaningful responses.</p> <p>Student cites 1 peer-reviewed source, current and relevant publication. Published within past 3 years.</p> <p><i>Each student response exceeds 200 words.</i></p>

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%.

Assignment/Case Study/Course Project Rubric (75 points total)

Criteria	Minimal	Competent	Effective	Mastery
<p>Pts Possible: 0 - 50</p> <p>Critical & Clear</p> <p>Addresses the Problem/Issue presented directly. Demonstrates active critical thinking relevant to problem identification and effective solutions.</p>	<p>Pts Possible: 0 - 12</p> <p>Work did not consistently meet expectations, as significant details of the assignment are not addressed. Lacks critical thought, analysis and application.</p>	<p>Pts Possible: 13-25</p> <p>Comprehension is not shown consistently throughout the assignment. Marginal responses; content, concepts, ideas/responses not fully developed.</p>	<p>Pts Possible: 26-39</p> <p>Demonstrates satisfactory understanding but does not answer all questions/scenario in full. Demonstrates some knowledge of the content and business vocabulary.</p>	<p>Pts Possible: 40-50</p> <p>Relevant use of vocabulary applied throughout the assignment. Demonstrates superior knowledge of concepts and theories.</p>

Criteria	Minimal	Competent	Effective	Mastery
Pts Possible: 0 – 25	Pts Possible: 0 - 9	Pts Possible: 10 - 14	Pts Possible: 15 - 19	Pts Possible: 20 - 25
Properly Written Structure and Writing include effective use of peer-reviewed resources and APA 6 th edition formatting.	Work does not meet expectations. Relevant critical thought/analysis is not demonstrated in the assignment. Partially addresses the topic. Does not follow APA 6 th edition. No use of peer-reviewed resources. <500 words	Comprehension is not demonstrated. Grammar/spelling errors; unorganized deliverable. Lacks focus on content. Does not follow APA 6 th edition. Peer-reviewed resources are not current or are not effective. 600-750 words	Organized deliverable, directions followed. Content needs additional focus for innovative responses other than restatement of text. Appropriate APA formatting is seen, but not extensive. Provides some relevant, current peer-reviewed resources. 751-999 words	Relevant use of vocabulary and professional writing structure. Well-organized response of at least 1-full page that fully and completely addressed all the criteria/questions using proper APA 6 th edition formatting. Provides appropriate, relevant and current peer-reviewed sources as directed in the assignment. >1000 words