**SCMT 322: Logistics** 

Prerequisite(s): None

**Credits: 3** 



#### **I. Course Description**

This course enables the student to delve into the vital field of Logistics and how it relates to the supply chain. Major areas of study include the evolution, philosophy, concepts, tools, and techniques associated with Logistics. Specific topics to be examined include an introduction to supply chain management; global dimensions of supply chain; role of logistics in supply chain; distribution and omni- channel network design; sourcing materials and services; producing goods and services; demand management; order management and customer services; managing inventory in the supply chain; managing fulfillment operations; managing the flow of the supply chain; aligning supply chains; supply chain performance measurement and financial analysis; managing information flows; and strategic challenges and change for the 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 logistics in the overall supply chain of the firm.
- 2. Explain the interdependence of the supply chain with other key functional areas of the firm.
- Identify and evaluate the key factors and the interdependence of sourcing materials/services, demand management and order management in the design of an effective supply chain.
- 4. Identify and evaluate how to manage inventory in the supply chain, manage the distribution channel, and manage transportation flow through the supply chain.
- 5. Identify and evaluate comparative approaches to supply chain management in a global context.
- 6. Explain the use of performance measurements, supply chain technology, and adapting to changes to align the 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.

Coyle J.J., Langley J., Novack R. A. & Gibson B.J. (2017). Supply chain management: A logistics perspective (10th ed.). Cengage South-Western. ISBN: 978-1-305-85997-5

Zigarelli M. A. (2008). Management by Proverbs: Scriptural Wisdom for Superior Results Paperback – June 30, 2020

ISBN: 9780578718217

#### IV. Weekly Information

#### Module One - Week 1

Supply Chain Overview and the Global Dimensions of Supply Chain

#### **Objectives**

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

- 1.1 Examine the 5 external forces of the supply chain
- 1.2 Identify integrated supply chain characteristics
- 1.3 Recognize different supply chain flows
- 1.4 Identify supply chain issues in an organization
- 1.5 Explore supply chains in the global economy

#### Reading

• Read chapter 1 and 2 of the Coyle J.J., Langley J., Novack R. A. & Gibson B.J. (2017). Supply chain management: A logistics perspective, (10th 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

**Role of Logistics in Supply Chains and Distribution Channels** 

#### **Objectives**

- 2.1 Recognize the contributions of logistics in improving organizational supply chains.
- 2.2 Identify how efficient and effective logistics management contributes to the vitality of the economy and improves global competitiveness.
- 2.3 Discuss the value-added roles of logistics on both a macro and micro level.
- 2.4 Differentiate the relationship between logistics and other important functional areas in an organization, including manufacturing, marketing, and finance and their unique contributions to efficiency and effectiveness.
- 2.5 Discuss the importance of management activities in the logistics function.
- 2.6 Analyze logistics systems from several different perspectives to meet different objectives.
- 2.7 Determine the total costs and understand the cost tradeoffs in a logistics system.
- 2.8 Recognize the critical need to evaluate the structure and functioning of supply chain networks, and for making changes and improvements as appropriate.
- 2.9 Identify an effective process for supply chain network design.
- 2.10 Recognize key locational determinants, both regional/national/global and site-specific, and the impacts they may have on prospective location alternatives.
- 2.11 Identify the different types of modeling approaches that may be used to gain insight into supply chain network design and facility location decision making.
- 2.12 Differentiate between a marketing channel and a logistics channel.
- 2.13 Recognize the relevance of "omni-channel" supply chain strategies, and the impacts on the structure and functioning of supply chains.

- Read chapter 3 and 4 of the Coyle J.J., Langley J., Novack R. A. & Gibson B.J. (2017).
   Supply chain management: A logistics perspective, (10th ed.).
- Read Principles 6 and 7 in Management by Proverbs book

#### **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

#### **Sourcing Materials and Services/Producing Goods and Services**

#### **Objectives**

- 3.2 Identify the role and nature of purchasing, procurement, and strategic sourcing in a supply chain context.
- 3.3 Recognize the importance of types and of items and services purchased to the sourcing and procurement processes.
- 3.4 Realize and identify the strategic sourcing process.

- 3.5 Recognize principles and approaches for the effective management of sourcing and procurement activities.
- 3.6 Determine the importance of companies having effective relationships with suppliers and for developing meaningful processes for evaluating suppliers.
- 3.7 Examine the concept of Total Landed Cost (TLC) and its value to the procurement process.
- 3.8 Identify contemporary advances in the areas of e-sourcing and e-procurement, and appreciate the roles played by various types of e-commerce models.
- 3.9 Discuss the strategic value-adding role operations plays in the supply chain.
- 3.10 Explore the concept of a transformation process and its application to goods and services.
- 3.11 Explain the tradeoffs and challenges involved in production operations.
- 3.12 Identify the primary production strategies and types of planning.
- 3.13 Discuss the primary assembly processes and production methods for goods creation.
- 3.14 Describe the various production process layouts.
- 3.15 Explain the role of productivity and quality metrics for improving operations performance.
- 3.16 Explain how information technology supports efficient production of goods and services.

- Read chapter 5 and 6 of the Coyle J.J., Langley J., Novack R. A. & Gibson B.J. (2017). Supply chain management: A logistics perspective, (10th ed.).
- Read Principles 8 and 9 in Management by Proverbs book

#### **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

#### **Demand Management, Order Management and Customer Service**

#### **Objectives**

- 4.1 Explain the critical importance of outbound-to-customer logistics systems.
- 4.2 Discuss the growing need for effective demand management as part of an organization's overall logistics and supply chain expertise.
- 4.3 Identify the types of forecasts that might be needed and understand how collaboration among trading partners will help the overall forecasting and demand management processes.
- 4.4 Recognize the basic principles underlying the sales and operations planning process.

- 4.5 Identify the key steps in the order fulfillment process and appreciate the various channel structures that might be used in the fulfillment process.
- 4.6 Recognize the relationships between order management and customer service.
- 4.7 Explore how organizations influence customers' ordering patterns as well as how they execute customers' orders.
- 4.8 Discuss that activity-based costing (ABC) plays a critical role in order management and customer service.
- 4.9 Identify the various activities in the SCOR process D1 (deliver stocked product) and how it relates to the order-to-cash cycle.
- 4.10 Explain the various elements of customer service and how they impact both buyers and sellers.
- 4.11 Define the cost of a stockout.
- 4.12 Explore the major outputs of order management, how they are measured, and how their financial impacts on buyers and sellers are calculated.
- 4.13 Explain the concept of service recovery and how it is being implemented in organizations today.

• Read chapter 7 and 8 of the Coyle J.J., Langley J., Novack R. A. & Gibson B.J. (2017). Supply chain management: A logistics perspective, (10th 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 Managing Inventory in the Supply Chain/Distribution

#### **Objectives**

- 5.1 Define the role and importance of inventory in the economy.
- 5.2 Define the major reasons for carrying inventory.
- 5.3 Discuss the major types of inventory, their costs, and their relationships to inventory decisions.
- 5.4 Recognize the fundamental differences among approaches to managing inventory.
- 5.5 Describe the rationale and logic behind the economic order quantity (EOQ) approach to inventory decision making, and be able to solve some problems of a simple nature.
- 5.6 Examine alternative approaches to managing inventory—just-in-time (JIT), materials requirement planning (MRP), distribution requirements planning (DRP), and vendor-managed inventory (VMI).
- 5.7 Explain how inventory items can be classified.

- 5.8 Identify how inventory will vary as the number of stocking points changes.
- 5.9 Define needed adjustments to the basic EOQ approach to respond to several special types of applications.
- 5.10 Discuss the strategic value-adding role distribution plays in the supply chain.
- 5.11 Recognize the tradeoffs between distribution and other supply chain functions.
- 5.12 Explore the analytical framework for distribution planning decisions.
- 5.13 Evaluate fulfillment strategies and distribution methods.
- 5.14 Describe the primary fulfillment processes and support functions in distribution center (DC) operations.
- 5.15 Use productivity and quality metrics to analyze fulfillment performance.
- 5.16 Describe how information technology supports distribution operations.
- 5.17 Discuss materials-handling objectives, principles, and equipment uses.

• Read chapter 9 and 10 of the Coyle J.J., Langley J., Novack R. A. & Gibson B.J. (2017). Supply chain management: A logistics perspective, (10th 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 Managing the Flow and Aligning the Supply Chain

#### **Objectives**

- 6.1 Explain the role transportation plays in the supply chain.
- 6.2 Discuss the service and cost characteristics of the primary transportation modes.
- 6.3 Discuss the key activities involved in transportation planning and execution.
- 6.4 Explain current transportation management strategies used to improve supply chain performance.
- 6.5 Explore service and cost metrics to analyze transportation performance.
- 6.6 Describe how information technology supports transportation planning and execution.
- 6.7 Identify the concept of alignment and its importance to supply chain management
- 6.8 Recognize the types of supply chain relationships and their importance.
- 6.9 Discuss a process model that will facilitate the development and implementation of successful supply chain relationships to help achieve alignment.
- 6.10 Recognize the importance of collaboration and collaborative supply chain relationships.
- 6.11 Discuss the potential importance of outsourced logistics services to supply chain management, and the types of value that may be created through the use of third-party logistics (3PL) providers and 4PL<sup>TM</sup> providers.

- 6.12 Examine the extent to which various outsourced supply chain services are used by client/customer firms and the types of benefits that are experienced.
- 6.13 Discuss the role and relevance of information technology-based services to 3PLs and their clients/customers.
- 6.14 Identify the extent to which customers are satisfied with 3PL services and identify where improvement may be needed.
- 6.15 Explore some of the likely future directions for outsourced logistics services.

• Read chapter 11 and 12 of the Coyle J.J., Langley J., Novack R. A. & Gibson B.J. (2017). Supply chain management: A logistics perspective, (10th 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

#### Performance Measurement and Financial Analysis/Technology

#### **Objectives**

- 7.1 Explain the scope and importance of supply chain performance measurement.
- 7.2 Explain the characteristics of good performance measures.
- 7.3 Discuss the various methods used to measure supply chain costs, service, profit, and revenue.
- 7.4 Define the basics of an income statement and a balance sheet.
- 7.5 Demonstrate the impacts of supply chain strategies on the income statement, balance sheet, profitability, and return on investment.
- 7.6 Explain the use of the strategic profit model.
- 7.7 Analyze the financial impacts of supply chain service failures.
- 7.8 Utilize spreadsheet computer software to analyze the financial implications of supply chain decisions.
- 7.9 Explain the importance of information to supply chain management.
- 7.10 Explain information requirements in the supply chain.
- 7.11 Define the capabilities of an integrated supply chain information system.
- 7.12 Describe and differentiate between the primary types of supply chain solutions.
- 7.13 Discuss the critical issues in technology selection and implementation.
- 7.14 Recognize the technological innovations that are influencing supply chain

• Read chapter 13 and 14 of the Coyle J.J., Langley J., Novack R. A. & Gibson B.J. (2017). *Supply chain management: A logistics perspective, (10th ed.).* 

#### **Deliverables**

- Discussion board post and responses—main posts due on Thursday and replies are due on Sunday
- Case Study due Sunday
- Final Cumulative Exam 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.

- 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 <u>prior written approval</u> (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 <u>Class Discussions</u> for late discussion post policy.

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

#### **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, 7<sup>th</sup> 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.
- Final Exam will be cumulative in Week 8.

#### **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.

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A = 900 - 1000 \text{ points}
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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	Pts Possible: 0	Pts Possible: 10
Initial Post	No post or did not follow instructions at all.	Posted following instructions.
Introduction.		
Pts Possible: 0 or 10	Pts Possible: 0	Pts Possible: 10
Response Posts	No post or did not follow instructions at all.	Posted following instructions.
Welcome.		

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
Pts Possible: 0 - 20	Pts Possible: 0 - 5	Pts Possible: 6 - 10	Pts Possible: 11-	Pts Possible:16-20
Pts Possible. 0 - 20	rts rossible. 0 - 5	Pls Possible. 0 - 10	15	F 13 F 0331b1E.10-20
Initial Post	Student provides	Student makes	13	Student provides
	weak contribution	contribution by	Student advances	relevant and
Understanding:	to the discussion	making a mostly	the discussion and	thought-
	board. Addresses	complete	body of	provoking
Discovers and	the questions in a	response to the	knowledge	viewpoints to the
conveys	manner that is	questions. The	providing	question. Post is
understanding	unclear or does	contribution is	relevant, original	innovative and
through relevant	not convey	mostly	thoughts to the	indicates a high
discussion with	concept	restatement of	question. Student	level of thought.
peers. Relevant	understanding.	materials. Student	conveys thoughts	
and proper	Shows evidence	conveys thoughts	in a well- rounded	Student writing
business writing	of critical thought	adequately;	manner that	shows a high level
and critical	but is not concise	however, needs	shows	of critical thought,
thought	or complete.	to further develop	understanding,	analysis and
development. Posts timely.	Does not cite any	critical aspects.	critical thought	application of
Posts timely.	peer-reviewed sources. <i>Post is</i>	Student cites 1	and application of	concepts and ideas. Student
	less than 75	peer-reviewed source. Not in	concepts. Student cites 2 peer-	cites 2 peer-
	words.	appropriate APA	reviewed sources	reviewed sources
A minimum of 2	words.	format. A few	in the body of the	in the body of the
peer-reviewed	0 points if post is	writing errors.	post. Not APA	post in proper
sources are cited	not submitted by	Witting Circles	format.	APA format.
in the post and	11:59 p.m. on	Post has between		
listed in	Thursday.	75 - 124 words.	Well written.	Very well-written.
appropriate APA	-			
format at the end			Post has between	Post exceeds 250
of the post.			125 – 250 words.	words.
Pts Possible: 0 - 20	Pts Possible: 0 - 5	Pts Possible: 6 - 10	Pts Possible: 11-	Pts Possible: 16-
. 13 / 033/10/6. 0 20		. 13 / 333/5/6. 0 10	15 1 0331b1c. 11	20
Response Posts	Student shows	A student shows	- <del>-</del> -	- <del>-</del> -
	minor	adequate	Student advances	Student advances
Discovers key	comprehension of	understanding of	the discussion	the discussion
areas of	the concepts and	the knowledge	providing	providing
knowledge and	viewpoints from	and concepts	additional	additional
concepts from	peers. The	posted by peers.	commentary and	commentary that
peers. Furthers	responses are	The responses are	critique. The	is relevant or
the body of	vague and do not	mostly "I agree"	responses are	offers an
knowledge by	show		correct but mostly	alternative.

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

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

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 <sup>th</sup> edition formatting.	Work does not meet expectations. Relevant critical thought/analysi s is not demonstrated in the assignment. Partially addresses the topic. Does not follow APA 6 <sup>th</sup> edition.  No use of peerreviewed resources.  <500 words	Comprehension is not demonstrated. Grammar/spelli ng errors; unorganized deliverable. Lacks focus on content. Does not follow APA 6th 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 peerreviewed resources.  751-999 words	Relevant use of vocabulary and professional writing structure. Wellorganized response of at least 1-full page that fully and completely addressed all the criteria/questions using proper APA 6th edition formatting.  Provides appropriate, relevant and current peerreviewed sources as directed in the assignment.