

## Institutional Mission

Arkansas Tech University-Ozark Campus, in partnership with the community, will provide a quality educational environment which will enable all students to learn the skills and acquire the knowledge necessary for them to become contributing members in the workforce and in society. Arkansas Tech University is dedicated to student success, access, and excellence as a responsive campus community providing opportunities for progressive intellectual development and civic engagement. Embracing and expanding upon its technological traditions, Tech inspires and empowers members of the community to achieve their goals while striving for the betterment of Arkansas, the nation, and the world.

## Program Mission

Logistics Management focuses on the logistics of planning, implementing, and controlling the effective and efficient flow of goods and services. The mission of this program is to equip students in workforce preparedness to immediately enter into any facet of logistics including procurement, global logistics, warehousing, transportation, technology divisions in logistics, and project management, as well as obtain skills and credentials recognized in the industry.

## 1 Calendar Year Assessment Information

2020

Program Learning Outcomes (Adopted Oct 2017) 1. Demonstrate basic understanding of logistic software systems and applications. 2. Demonstrate the ability to perform demand management to improve efficiency, perform inventory control measures, and optimize warehouse layouts. 3. Explain the impact of logistics and supply chain operations on a firm's profitability, identifying the steps necessary to evaluate and purchase a new product or service, as well as complete a project plan, basic budget, and presentation. 4. Explain the role of transportation and identify the resources needed for domestic and global transactions and shipments. 5. Demonstrate employability skills including effective communication, planning, critical thinking and problem solving, quality customer service skills, and conflict resolution. 6. Exhibit ability to work on a team project, present a professional presentation, and understanding of sales process.

----- (\*\*NOTE\*\* . This block provides a brief description of actions taking place (or planned to take place) during the current assessment cycle. If there are more (or less) outcomes assessed, please alter as necessary. Additional comments are also welcome.) Point of Contact for this year's assessment (add additional names as

needed): 1) Heather Nelson 2) APPROVALS

----- Department Head

Approval:      Date: Dean Approval:      Date: Office of Assessment Review: Amanda Gardner  
Date: 9/8/21 -----

Program Level Context: (ex. Second year using Weave Assessment Management System, or ADHE  
Program Review conducted on 3/15/20) Student Learning Outcomes Assessed during Calendar Year  
2020 (Add more as necessary):      Outcome 1: all      Curriculum Committee Proposals or Changes  
(erase choice not used): Y / N      Assessment Data Used as Support for Change: (give  
Outcome #) Is Status of Project Noted in Title Bar Current? (erase choice not used): Y / N  
Change status in title bar above Are All Attachments Noted in Assessment Plan Added Below?  
(erase choice not used): Y / N ----- Additional Comments:

**1.1 Program Learning Outcomes**

Explain the role of transportation and identify the resources needed for domestic and global transactions and shipments.

Explain the role of transportation and identify the resources needed for domestic and global transactions and shipments.

**Action Plan**

Introduce students to transportation terminology and processes in LGM 1013-Principles Of Logistics Management and Supply Chain Management, review and analyze each mode of transportation in LGM 2023-Transportation Management, and apply knowledge of transportation modes to a project in LGM 2053-International Logistics.

Budget Source	Amount	Due	Status
	\$0.00		no due date set

Action Item 1	Created	Due	Status
	12/17/2020		

**1.1.1 Measures**

LGM 2023 Transportation Mgmt - Exam over Chapters 1 - 4

Exam covers Chapters 1 - 4 of the textbook. Topics include: The relationships between transportation and logistics, the supply chain, the economy, society, and the environment. The five modes of transportation (road, rail, water, air, and pipeline), as well as intermodal transportation. Economics of transportation, including accounting, economic, fixed, and variable costs, carrier cost metrics, carrier pricing, expressions of transportation rates, and additional

services and fees. Private transportation services, such as private road fleets and non-road fleets. Outsourcing transportation through contract carriage, 3PLs, 4PLs, freight forwarders, and brokers.

#### METHODOLOGY\*

Exam is in Blackboard as a multiple choice and short answer assessment.

#### SOURCE OF EVIDENCE

Test/Exam/Quiz - Academic Direct

### 1.1.1.1 Expectations/Target for this Outcome

Met

EXPECTATIONS/TARGET FOR THIS OUTCOME	Expect class to achieve a passing score of 70% or greater. *The calculated average will not include students who did not complete the work.
FINDINGS/RESULTS	Spring 2020 - Average score was 78.4%. Fall 2020 - Average score was 78.2%.
REFLECTION ON FINDINGS AND RECOMMENDATIONS FOR NEXT STEPS	Semester average increase/decrease by -0.2%. During Fall 2019, partnered with AgriBus department: student GA assessed student performance at question level, identified top 10 missed questions over 4 semester span Fall 2019 - Spring 2019). Evaluated potential root causes and suggested solutions. Using data to update exam clarity and measurements of CLOs.  Did not update for Spring or Fall 2020.
IMPROVEMENT TYPE	Academic Program Improvement
IMPROVEMENT DESCRIPTION	Improved Course Assignments
IMPROVEMENT	Plan on submitting course to eTech for QM certification in Fall 2021, and updating assignment.

### 1.1.2 Measures

LGM 2023 Transportation Mgmt -Exam over Chapters 5 - 8

Exam covers Chapters 5 - 8 of the textbook. Topics include: Transportation management decisions, such as network design, lane analysis, mode and carrier selection, service negotiations, contracts, service evaluations, and transportation documentation. Transportation technologies including the bullwhip effect, hosted vs. SaaS software, EDI, TMS, R&S systems,

automatic identification tools, and control and monitoring systems. Transportation's role in logistics and SC management, including lean logistics, merge-in-transit, VMI, CPFR, and collaborative transportation management. Transportation and global supply chains, including international modes of transportation, enablers and key players in transporting goods to global supply chains, and key documents used in global transportation.

**METHODOLOGY\***

Exam is in Blackboard as a multiple choice and short answer assessment.

**SOURCE OF EVIDENCE**

Test/Exam/Quiz - Academic Direct

**1.1.2.1 Expectations/Target for this Outcome**

Met

EXPECTATIONS/TARGET FOR THIS OUTCOME	Expect class to achieve a passing score of 70% or greater. *The calculated average will not include students who did not complete the work.
FINDINGS/RESULTS	Spring 2020 - Average score was 75.3%. Fall 2020 - Average score was 86.2%.
REFLECTION ON FINDINGS AND RECOMMENDATIONS FOR NEXT STEPS	Semester average increase/decrease by +10.9%. During Fall 2019, partnered with AgriBus department: student GA assessed student performance at question level, identified top 10 missed questions over 4 semester span (Fall 2019 - Spring 2019). Evaluated potential root causes and suggested solutions. Using data to update exam clarity and measurements of CLOs.  Did not update for Spring or Fall 2020.
IMPROVEMENT TYPE	Academic Program Improvement
IMPROVEMENT DESCRIPTION	Improved Course Assignments
IMPROVEMENT	Plan on submitting course to eTech for QM certification in Fall 2021, and updating assignment.

**1.1.3 Measures**

LGM 2023 Transportation Mgmt -- Recorded Video Presentation with PowerPoint  
A research presentation describing a software type of choice. Video must record student giving the presentation, only student will be visual in the presentation, and submit it on Blackboard

following the instructions in the weekly content folder. For assistance, use the articles in the folder "Final Presentation GUIDES". Select one software type specific to transportation (e.g. EDI, TMS, R&S, etc.), and discuss it with these topics at the minimum: A. What is the specific software name and what is it used for? Explain in detail what the system does, what it is meant to accomplish, who would use it. Provide real-world examples. B. How does the selected software type improve the efficiency of a company? How does it impact the efficiencies of the supply chain? Using all you have read in the text book, describe what the system automates/streamlines? C. Provide a visual representation of what the system would look like and how it would work between companies to improve communication or what it would do within a company. This may include how the system would integrate with other systems. D. Discuss whether this application would have a role in international logistics, and how. If not, why not? E. Complete a S.W.O.T. analysis on this software. Provide at least two (2) items under each category. F. Based on the S.W.O.T. analysis, give your opinion on how this software would give a company competitive advantage (Chapters 9 & 10). G. PowerPoint presentation – Use a Sans-Serif font; font is the same size on all slides; font is large enough to fill slide (not a lot of space around font); background color and text color are contrasting and NOT distracting; includes title slide and work cited slide; 1 slide per section; rule of 6 (no more than 6 bullets to a slide with no more than ~6 words per bullet); transitions (both verbal and visual) between slides. H. Slide with sources provided. Must include two sources other than the textbook. I. Time constraints must be met for full credit.

#### METHODOLOGY\*

Create a PowerPoint and upload in Discussion post for peer review and instructor feedback. Record presentation in Media Gallery. Peer review of presentation using Discussion post that contains PowerPoint.

#### SOURCE OF EVIDENCE

Presentation - Academic Direct

### 1.13.1 Expectations/Target for this Outcome

Met

EXPECTATIONS/TARGET FOR THIS OUTCOME Expect class to achieve a passing score of 70% or greater. \*The calculated average will not include students who did not complete the work. Rubric attached.

FINDINGS/RESULTS Spring 2020 - Average score was 83.5%. Fall 2020 - Average score was 96.7%.

REFLECTION ON FINDINGS AND RECOMMENDATIONS FOR NEXT STEPS	<p>During Fall 2019, AgriBus GA assessed final project for alignment with PLOs. Found that paper did not support CLOs or PLOs clearly or measurably.</p> <p>Implemented change in Spring 2020: updated final project to a video and PowerPoint presentation about software used in transportation, including peer-to-peer evaluation. This created a clear alignment to PLOs #1, #3, #4, #6. Rubric is attached.</p> <p>New final provided better assessment of student understanding and accomplishment of CLOs and PLOs, including core competencies of professional presentation and communication skills.</p>
IMPROVEMENT TYPE	Academic Program Improvement
IMPROVEMENT DESCRIPTION	Improved Course Assignments
IMPROVEMENT	Will make a change in 2021: Have student present PowerPoint in video as well. Review through 2021, and then drop assessment if meeting goals.

### 1.1.4 Measures

LGM 2053 International Logi -- Group portfolio of international shipment case study Course offered in Spring semester only as part of capstone. Each team is assigned a different case study of an international shipment, either an import or an export. Objectives for the project are: A. Understand and perform the logistics of moving a shipment from inside the US to outside the US, OR moving a shipment from outside the US to inside the US. B. Understand how to properly fill out documents for international shipments C. Become familiar with contacting third parties for assistance with international shipments D. Learn the rules and regulations of border/ customs procedures E. Calculate travel time for an import or export F. Develop a total cost for an international shipment Portfolio submitted by team of 3 - 4 students that includes, 1) a Word document with a cover page, TOC, and an overview of shipment solution, 2) all necessary customs and shipping documents for the specific international shipment, and 3) a line item quote detailing the total cost of the shipment, supported by quotes.

#### METHODOLOGY\*

Student teams collaborate in-person or on-line, use textbook to identify what documents are needed for case study shipment, and contact industry professionals for direction. Assignment submission is uploading documents (Word and PDFs) into Blackboard.

## SOURCE OF EVIDENCE

Portfolio - Academic Direct

### 1.1.4.1 Expectations/Target for this Outcome

Met

EXPECTATIONS/TARGET FOR THIS OUTCOME	Expect each team to achieve a passing score of 70% or greater. *The calculated average will not include students who did not complete the work.
FINDINGS/RESULTS	Spring 2020 - Average score was 82%
REFLECTION ON FINDINGS AND RECOMMENDATIONS FOR NEXT STEPS	Overall academic calendar year average Increase/Decrease from Spring 2019 (73.5%) to Spring 2020 (82%) by +8.5%.
IMPROVEMENT TYPE	Academic
IMPROVEMENT DESCRIPTION	No Improvements Deemed Necessary
IMPROVEMENT	Will review through 2021, and then drop assessment if meeting goals.

### 1.2 Program Learning Outcomes

Demonstrate the ability to perform demand management to improve efficiency, perform inventory control measures, and optimize warehouse layouts.

Introducing the concept of PLO in LGM 1013 Principles of LGM, application in LGM 2033

Warehouse & Inventory Mgmt, and mastery of objective in LGM 2083 Operations Management.

#### Action Plan

Using Manufacturing Skill Standards Council (MSSC) industry certification as assessment for program. Certification has 2 exams levels: Certified Logistics Associate (CLA) and Certified Logistics Technician (CLT). Student must pass CLA to sit for CLT; official certification is CLT only. Initial goal was to incorporate certification exams as part of LGM 2083 Operations Management course, a capstone course in the LGM program, that would assess student knowledge gained in the program against and industry credential.

Budget Source	Amount	Due	Status
	\$0.00	no due date set	Complete

## 1.2.1

### Measures

#### MSSC CLA & CLT Certification

Initiated change in curriculum in Spring 2018. The purpose of the Certified Logistics Technician (CLT)® certification program is to recognize through certification, individuals who demonstrate mastery of the core competencies of material handling at the front-line (entry-level to front-line supervisor) through successful completion of the certification assessments. The goal of the CLT certification program is to raise the level of performance of logistics technicians both to assist the individuals in finding higher-wage jobs and to help employers ensure their workforce increases the company's productivity and competitiveness. The content of the certification track was developed by Manufacturing Skill Standards Council. CLA and CLT Certification examinations are owned and administered by the Manufacturing Skill Standards Council (MSSC). The goal of incorporating this certification in the capstone course LGM 2083 was to assess if the curriculum is in line with an industry expectations. This certification was chosen due to the direct correlation with the LGM PLOs and more importantly that the industry recognizes this credential, including Walmart using it for training front line workers.

#### METHODOLOGY\*

Students complete proctored (multiple choice) exam online.

#### SOURCE OF EVIDENCE

Certification - Academic Direct

## 1.2.1.1

### Expectations/Target for this Outcome

Pass certification exam Met

EXPECTATIONS/TARGET FOR THIS OUTCOME 75% of class pass exam and obtain CLT certification

FINDINGS/RESULTS Spring 2019 passing rates: CLA 100%; CLT 17% Spring 2020 passing rates: CLA 83%; CLT 80%

REFLECTION ON FINDINGS AND RECOMMENDATIONS FOR NEXT STEPS 2019, second year, verbally guided students to review LGM 1013 Principles of LGM, LGM 2023 Transportation, and LGM 2033 Warehousing. Also, updated the CLT "Standards & Competencies" study guide to include specific areas of study. 2020, third year, improved study guide by reorganizing areas and updating CLA "Standards & Competencies".

Student feedback for 2020 is attached.

IMPROVEMENT TYPE





IMPROVEMENT  
DESCRIPTION

IMPROVEMENT

Based on student feedback and performance, plan MOVE certification to LGM 2033 Warehouse & Inventory Mgmt course beginning Fall 2021 for better alignment with curriculum. Submit LGM 2033 for etech review to obtain QM credential of course for better alignment and stuentsuccess.

### Project Attachments (2)

Attachments	File Size
 LGM 2023-Trans Mgmt Final Presentation_Instructions & Rubric (2020).docx	22KB
 MSSC_CLA.CLT_Student Feedback 2020.docx	14KB

## LGM 2023 – Transportation Management Final Presentation

Create a 7-12 minute presentation describing a software type of your choice. You must video record yourself giving the presentation, only you will be visual in the presentation, and submit it on Blackboard following the instructions in the weekly content folder. For assistance, use the articles in the folder "Final Presentation GUIDES".

Select one software type specific to transportation (e.g. EDI, TMS, R&S, etc.), and discuss it with these topics at the minimum:

- A. What is the specific software name and what is it used for? Explain in detail what the system does, what it is meant to accomplish, who would use it. Provide real-world examples.
- B. How does the selected software type improve the efficiency of a company? How does it impact the efficiencies of the supply chain? Using all you have read in the text book, describe what the system automates/streamlines?
- C. Provide a visual representation of what the system would look like and how it would work between companies to improve communication or what it would do within a company. This may include how the system would integrate with other systems.
- D. Discuss whether this application would have a role in international logistics, and how. If not, why not?
- E. Complete a S.W.O.T. analysis on this software. Provide at least two (2) items under each category.
- F. Based on the S.W.O.T. analysis, give your opinion on how this software would give a company competitive advantage (Chapters 9 & 10).
- G. PowerPoint presentation – Use a Sans-Serif font; font is the same size on all slides; font is large enough to fill slide (not a lot of space around font); background color and text color are contrasting and NOT distracting; includes title slide and work cited slide; 1 slide per section; rule of 6 (no more than 6 bullets to a slide with no more than ~6 words per bullet); transitions (both verbal and visual) between slides.
- H. Slide with sources provided. Must include two sources other than the textbook.
- I. Time constraints must be met for full credit.

## RUBRIC

	Unsatisfactory	Satisfactory	Exceptional	Score
	No Title slide (0 pts)		Title slide (10 pts)	10
A	Gives example of software type and gives basic definition. (5 pts)	Gives example and shows greater understanding of software type. Explains in greater detail what the system does and its uses. (15 pts)	Gives example and demonstrates great understanding of topic. Explains what the system does, who uses it, who it impacts, and why. (30 pts)	30
B	Impact on efficiency was not discussed. (0 pts)	One point was discussed for how efficiency is impacted by the program. (15 pts)	Two or more points were discussed for how efficiency is impacted by the program. (30 pts)	30
C	No visual representation provided. (0 pts)	Visual representation provided, but aids very little in showing how the system works. Some illustrations provided. (15 pts)	Visual representation provided with numerous illustrations to aid in greater understanding of how the system works. (30 pts)	30
D	Did not discuss whether or not the system could have a role in international logistics. (0 pts)	Answered the question with a yes or no, but did not give much detail on why. (15 pts)	Discussed whether or not the system could have a role in international logistics and explained why with more detail and examples. (30 pts)	30
E	S.W.O.T. analysis is not discussed / displayed. (0 pts)	S.W.O.T. analysis is partially complete – not all categories have at least two items identified. S.W.O.T. analysis is complete but incorrect. (15 pts)	At least two items are correctly provided for each category in the S.W.O.T. analysis. (30 pts)	30

F	Opinion on S.W.O.T. analysis is not discussed. (0 pts)	Opinion on S.W.O.T. analysis is discussed, but did not give much detail on why, or is insufficient length. (15 pts)	Opinion on S.W.O.T. analysis is sufficient in length, and thoroughly discussed and supported. (30 pts)	30
G	Used incorrect font, lacked transitions and slides were long and wordy. Student did not keep eye contact with camera. (0 pts)	Uses correct font and some transitions between slides. Slides were more concise. Student noticeably has studied topic. (15 pts)	Uses correct font and all slides use appropriate transitions. Followed rule of 6's. Clearly student has studied subject deeply with high understanding of topic. (30 pts)	30
H	No sources slide. (0 pts)	Sources slide contains one source.  Sources slide contains 2 outside sources, but is cited incorrectly. (15 pts)	Sources slide contains at least 2 outside sources other than the book, and are cited correctly. (30 pts)	30
I	Outside of time constraints. (-2 pts/min.)		Inside time constraints (10 pts)	10

DISCUSSION POST	Post presentation on Blackboard, but did not review any other students' presentations, or did not provide adequate feedback to students. (20 pts)	Post presentation on Blackboard and reviewed 1 other students' presentations with adequate feedback. (50 pts)	Post presentation on Blackboard and reviewed 2 other students' presentations and gave adequate feedback. (100 pts)	100
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# STUDENT FEEDBACK ON MSSC CLA & CLT EXAMS

As part of final assignment for course, student required to answer question:

“Include in your Word document what you felt was the most difficult part of the exams, what material you felt you were NOT prepared for, and any recommendations for improvement in preparation / testing site / etc.”

Student responses are below, by year (Spring semester only):

## 2020

I cannot make serious suggestions about the CLA / CLT test itself because I did not study for them and not being prepared falls squarely on my shoulders. As far as testing sites, I would have liked to be able to test at the main campus as I work in Russellville, but the drive to Ozark is not bad, so not much of a complaint there. Audrey C.

The CLA test was more difficult for me than the CLT exam was. We were provided with a study guide for both which was super helpful! The CLA was more basic knowledge about warehousing and safety and I thought would be the easier one of the two exams. However, I think I should have spent more time learning about the different equipment. There were several questions about different warehousing equipment that I knew nothing about as well as questions about color coding for different storage bins and safety questions that I felt a little under prepared for. The CLT test was much easier for me because I felt like it was over more of an overview of warehouse procedures rather than the fine details of warehousing. It also went over inventory control which is something I learned about in several classes over the course of our degree. I liked that we were able to take both tests on campus instead of having to use ProctorU which is not the most user friendly. All in all, I do feel like the last 2 years has prepared me for these exams. The only suggestion I could make would be to maybe take the CLA as a Warehousing and Inventory Management final and the CLT as the Operations Management final. I think if I had taken the CLA with Warehousing and Inventory I would have done a little better as I would have had the material fresh on my mind. Kelsey E.

CLA-what was hard was the warehouse equipment and the different agencies and what they control. Mary F.

I felt as if the CLT and CLA exams were really all encompassing. I found myself recalling information from past classes that were suddenly relevant to this exam. It is a great way to ensure students are understanding what they are learning. I believe the forms were challenging simply because there was so many of them to remember. Also, the exams seemed heavy on the inventory and management side of logistics. Joe G.

The hardest part of the CLA/CLT test was the identification of warehouse picking systems, along with specialized types of equipment or procedures used within the warehousing process.  
George M.

All areas of the exam were topics we covered in the program; however, due to unwarranted circumstances surrounding the pandemic of Covid-19, I feel the testing environment was less than ideal. This coupled with the stress of taking the test just made it hard to concentrate and focus. In general, I usually don't do well with tests anyhow. So, this was also a primary downfall for me. If I could make one recommendation, it would be to have access to some form of study guide. I feel like I should have known all of the questions presented on the exam, but material which wasn't covered recently is difficult to remember. An official study guide would have been a great resource. Anthony S.