

Transportation Operations and Logistics, PUBP 716, Fall 2003

DRAFT SYLLABUS

Irvin Varkonyi
ivarkony@gmu.edu
703 863-9686

This course will provide a multi-modal survey of domestic and international transportation operations, along with their impact on business logistics. It will focus on internal and external drivers within the air, maritime, and surface industries that shape the direction of each, their relationship to supply chain management and their contribution to domestic and global economies. How are the requirements of transportation security and the new Department of Homeland Security impacting transportation stakeholders including carriers, infrastructure, shippers and customers? An historical perspective will be offered including the impact of government regulation, technology, labor, and globalization. Everything is connected!

Our weekly topics will be subject to change based on speaker availability and schedule requirements. Syllabus will be periodically updated for content during the semester.

- 1. 8/26 - Introduction to the topic; introduction of the participants**
 - a. Definitions provided by the participants
 - b. Establish project teams of two or three
 - c. Build a bibliography in this prototype course as we look toward the future
 - d. Review the required text and additional sources of information
 - e. Business Logistics

- 2. 9/2- Industry structure: Transportation and Logistics**
 - a. Origins of Logistics
 - b. Transport Strategies.
 - c. Project teams – Finalize selection of topics for research and presentation in each class
 - d. Text – Chapters 1, q.3,5,10, 12

- 3. 9/9 - Industry structure: Transportation and Logistics**
 - a. Trucking and infrastructure
 - b. Guest speaker
 - c. Decision criteria
 - d. Text – Chapter 2, q. 3,4,13

- 4. 9/16 Technology systems**
 - a. Connectivity of warehouse management systems and transportation management systems
 - b. Guest speaker
 - c. Additional reading -

- 5. 9/23 Industry structure: Transportation and Logistics**
 - a. The rail industry
 - b. Mass transit
 - c. Guest speaker
 - c. Project team (A)
 - d. Text - Chapter 6, q. 2, 4, 6, 10, 11

- 6. 9/30 - Industry structure: Transportation and Logistics**
 - a. The maritime industries
 - b. Guest speaker –
 - c. Project team (B)
 - d. Text -; chapter 7, q. T4 and Orion Foods case study – please write up in outline form

- 7. 10/7 – Industry structure: Transportation and Logistics**
 - a. The air industry
 - b. Guest speaker –
 - c. Project team (C)
 - d. Text – Chapter 3, q. 3,4,11,14

- 8. 10/21 - Transportation Management Systems – An overview of software and hardware**
 - a. Guest Speaker
 - b. Systems resources
 - c. Project team (D)
 - d. Text – Chapter 5, q. 2, 4
 - e. First short paper due

- 9. 10/28 – Homeland Defense, Security and Logistics**
 - a. Guest Speaker
 - b. The costs of security – employees, equipment; terminals; customer service
 - c. Additional reading

- 10. 11/4 - The Executive and Legislative impact on Transportation**
 - a. Guest Speaker
 - b. The laws of Congress and the Laws of Nature
 - c. Project team (E)
 - d. Text – Chapter 8, q. 2,3, 4, 8

11. 11/11 – Transportation infrastructure – Effects on logistics and intermodal relationships

- a. Guest speaker
- b. Do logistics consider infrastructure?
- c. Project team (F)
- d. Text – Chapter 9, q. F4, F7, Case Study on World Oil

12. 11/18 – Military Logistics

- a. Guest Speaker –
- b. Crossovers between military and commercial logistics
- c. Project team (G)
- d. Text – Chap 13, q. 2, CM1, T5

13. 11/25 – Outsourcing transportation

- a. Outsourcing
- b. Guest Speaker –
- c. Third Party Logistics
- d. Project team (H)
- e. Text – Chap 15, q. 3, 7, 10
- f. Second short paper due

14. 12/2 - Final review

15. 12/9 – Final Exam

Required Text:

Ballou, Ronald H. Business Logistics Management, Fourth Edition. Upper Saddle River, NJ: Prentice Hall, 1999

Additional sources:

- a. <http://logistics.about.com>. – Comprehensive website on transportation and logistics
- b. www.clm1.org - The Council of Logistics Management
- c. www.kewill.com - Kewill Shipping Systems
- d. www.trafficworld.com - Traffic World Magazine
- e. www.joc.com - Journal of Commerce Magazine

Requirements:

1. Project team presentation (20%) – Working with one or two others requiring subject research and in class presentation
2. Short papers (2) (40%) – Brief essays of 500-700 words each
3. Final exam (30%) – Open book/open notes
4. Class Participation (10%)

Some Project Team options (students may also suggest topics):

1. Less than truckload (LTL) industry – Impact of technology (Con-Way Transportation Systems)
2. Supply chain and air express industry – Joint equity arrangements (General Motors/Menlo Logistics/Vector)
3. Automotive and rail cooperation –
4. Maritime support for military deployments – Partnership between the DoD and US Flag carriers (today's battlefield in the Middle East)
5. Highways and the supply chain – The Oklahoma bridge collapse
6. Just in Time Supply Chain management for fashion industry – Partnership of air carriers with the Limited