Syllabus: IDS 3163, Global Supply Chains & Logistics

Instructors

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Course Purpose, Goals, and Outcomes

The goals of this course are:

- 1. For students to gain a multi-faceted perspective on the global dimensions of today's business operations through understanding how modern, global supply chains and logistics networks operate.
- 2. For students to understand the multi-disciplinary facets of how a global supply chain can be viewed, analyzed, and operated.
- 3. For students to explain multiple key social science theories and popular perspectives on the history, geography, structure and ethics of trade, and apply them to the analysis of supply chains.

Course Description

Global supply chains interact with all facets of business and society. In this interdisciplinary course, students will gain a multi-faceted perspective on the global dimensions of today's business operations. Students will explore the interrelationships between global supply chains, logistics operations, society, and the environment. The study of business operations will be set in the context of social science theories and popular perspectives on the history, geography, structure and ethics of trade. Students will examine the impacts of current trade systems on both production and consumption regions and the human and environmental consequences of trade patterns.

Textbook & Required Readings

Mangan, J., Lalwani, C., and Butcher, T., <u>Global Logistics & Supply Chain Management</u>, John Wiley, 2008.

Bernstein, W. A Splendid Exchange: How Trade Shaped the World. Grove Press. 2009 (approximately \$12).

Coe, N., Kelly, P., and Yeung. H "A Geographical Approach to the Economy" pgs. 3-30 in Economic Geography: A Contemporary Introduction. Blackwell, 2007.

Appiah, K.A., The Case for Contamination, New York Times, January 1, 2006. Online at www.nytimes.com.

The Economist – students will obtain a subscription for the semester. (12 weeks for \$19.95 or 25 weeks for \$39.90). The Economist routinely addresses the PEST (political, economic, social, and technical issues) related to supply chains and logistics. It has separate sections on North America, South America, Africa, Asia, Middle East, and Europe allowing for a global perspective of supply chain issues.

Active Learning Strategies

The course will be taught using team-based learning (TBL) promoted by Michaelsen (Michaelsen, Knight, and Fink, 2004, Team-based Learning, Stylus, Sterling, VA). Students will be formed into teams. Each week they are assigned the readings. The class starts with an individual multiple-choice quiz, followed by the team version on the assigned readings. These quizzes use specially designed scratch out forms. The instructors will be able to quickly review the quizzes and see what students don't understand and address those issues. The course time is then dedicated to activities to reinforce the readings.

Grading

Individual Quizzes 15%

Team Quizzes 15%

Simulation (team) 30%

Class team exercises 15%

Research paper 10%

Final Exam 15%

Quizzes – Multiple choice quizzes on the weeks assigned readings. The individual quizzes are done first, followed by the team quizzes.

Simulation – A simulation of supply chain operations and logistics will be performed throughout the semester. Students will be divided into multi-disciplinary teams such that each team is a company at one of the tiers of the supply chain of a fictitious line of airplanes. The teams will need to make decisions about their facility location, inventory methods, production planning, and other supply chain decisions. The teams make these decisions dynamically in competition with the other teams. The simulation is setup so that teams will gain insight into how their decisions affect others and how the decisions of other teams affect them. An important aspect of the simulation is the post-game analysis and discussion of what occurred during the simulation and its global implications.

Class team exercise – Each team will also do other exercises not directly tied to the simulation during class. These are listed in the course schedule and include case studies, in class exercises (facility location and poster description, and so forth).

Research paper – Each student will write a research paper on a global supply chain topic of interest to the student. The students will be provided with guidelines for paper format, content, length, and citations.

Final Exam – The final exam will ask the students to individually review and synthesize the knowledge gained from the lectures, readings, simulations, videos and class team exercises.

Course Topics:

1. History and Theories of Trade

Understand the long historical geography of trade in human societies. Explain different types of and reasons for trading over time. Articulate major theories of trade from the social sciences concerning its utility, practice and ethics.

- a. The origins and meanings of trade.
- b. Colonialism thru the making of a "global" economic system.
- c. Theories of trade and its benefits/costs.

2. Global Supply Chains

Definition of global supply chains, and their societal, business, and cultural contexts and impacts. Describe the many different perspectives for studying global supply chains (primarily the business, social science, engineering, and legal viewpoints, but also others (especially popular perspectives) through readings, case studies, and guest lectures).

- a. Definitions and terminology
- b. Drivers for economic globalization (labor costs, resources, regulation, etc.)
- c. Influence on world and national economies (NAFTA, employment, costs, standardization)
- d. Corporate strategy

3. Design of Supply Chains

Exploration of the many issues: labor costs, environment regulations, business regulations, tax, political stability, legal, cultural, educational levels, and so forth to consider when designing a supply chain. Exploration of how these decisions affect the societies the supply chains operate in. Supply chain decisions are:

- a. Facility location decisions
- b. Transportation network design decisions
- c. Outsourcing decisions
- d. Partnering decisions

4. Operation of Global Supply Chains

Exploration of the many daily decisions made to operate a global supply chain.

Exploration of the issues affecting how these decisions are made, how different cultural influences make the same decisions, and how these decisions affect global supply chain performance. Supply chain operational decisions are:

- a. Transportation routing and scheduling decisions
- b. Inventory policy decisions
- c. Contracts and international arbitration
- d. Trademark, protection of intellectual property
- e. Litigation and dispute resolution across borders

5. Impacts and Alternative Visions for Supply Chains

An examination of the impacts of current system of trade in both production and consumption regions. Explores both the human and environmental consequences of trade patterns. Examines of possible remedies for current maladies.

- a. Cultural impacts
- b. Livelihood impacts
- c. Human and environmental health impacts
- d. Alternatives and their limits

Course Schedule

Week	Topic	Sample Assignment (*We will also rely on the Economist)	Class Activity	Learning Outcome
1	Course Introduction Why do people trade? Historical geography of trade. Colonialism. Formation of Teams	Mangan et al. Chapters 1 Introduction; 2 Globalization of Trade; & 3 Supply Chain Strategies. Appiah, K.A., The Case for Contamination, New York Times, January 1, 2006.	Lecture	
2	Globalization of Trade - Theories of trade - The institutions of trade	Ohio Steel Towns Falling by the Wayside, D. Enninson, Dec 2009. Silicon Sweatshops, Shattered Dreams, J. Adams, Nov 17, 2009, GlobalPost.com	Team-based activity: Discuss affects of globalization of supply chains by comparing affect in Ohio on Steel and employment in Taiwan in electronics. – view from US and Chinese perspective how globalization of supply chains affects local economies and societies.	Goal 1: Global Perspective
3	Logistics	Ch 4 The Truck Driver Who Reinvented Shipping, Harvard Business Working Knowledge Series, A.J. Mayo and N. Nohria, October 3, 2005. Container Shipping and the Economy, excerpt from the book, "The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger" by M. Levinson, Princeton University Press, 2006. Trade and Transportation: Containerization, J.P. Rodrique, Encyclopedia of the Seas and Waterways of the World, Gale Publishing.	Team-based activity: Students will be asked to analyze a logistics issue from the consumer viewpoint and the provider viewpoint to demonstrate their ability to form a multiperspective analysis of a logistics problem.	Goal 1: Global Perspective

4	Facility Location	Ch 4	Teams assigned	Goal II:
	,	Myth of Made in China, NPR Article June 2009. Disney case highlights China supply chain pitfalls, Reuters, 2008. Who made your iPhone?	task to locate a facility according to various criteria provided to them (cost, market, regulation, etc.). Create a poster explaining their	Global Awareness
		Reuters, 2009.	decision. Students will be	
			able to demonstrate an understanding of the interrelatedness of local, global, international, and intercultural	
			issues, trends, and systems.	
5	Procurement	Ch 5 Cruise Lines – Global Sourcing of Crew (Giachetti et al. project with RCL on Crew Optimization Model).	Students will identify actions that individuals or groups have taken that has changed how logistics and	Goal III: Global Engagement
		Sourcing of coffee and other agricultural products, land use and sustainable farming, differences in global labor laws, customs, and what is acceptable.	supply chains are operated.	
6	Supply Chain Simulation Game		In simulation project report, the student teams will demonstrate recognition of at least three	Goal I: Global Perspective.
			perspectives in their situational assessment of the supply chain issues.	
7	Inventory	Ch 6 The technical and business challenges in managing inventory.		
		The economic issues related to carrying inventory.		
8	Inventory IRA & TRA	Video: Walmart		

9	Supply Chain Simulation Game		Simulation – students will demonstrate understanding of inventory and its economic impact	Goal IV: Apply Quantitative Reasoning
10	Warehouse Transport	Ch 7 & 8 Logistics of Humanitarian Aid – selected readings		
11	Logistics & Financial Mgmt	Ch 9 & 10 Video: Illicit Trade – a National Geographic produced video about the global trade in fake goods.		
12	Supply Chain Simulation Game		Students will be asked to demonstrate an understanding of the interrelatedness of local, global, international, and intercultural issues, trends, and systems by explain how their team performed vis-à-vis other teams and the simulated global trends and events.	Goal II: Global Awareness
13	Supply Chain Vulnerability, Risk, Robustness, & Resilience; Political impacts and economic impacts.	Ch 12 Articles dealing with Somali Pirates and shipping through Suez Canal and Gulf of Aden.		Goal II: Global Awareness
14	Cultural Impacts Human and Environmental Health Impacts; Local and Slow Movements; and Fair and Organic Trade, and Their Limits	English as Global Business Language The Great English Divide – Business Week, 2001. The Philippines and the English language: E for English The cost of being tongue-tied in the colonisers' tongue, Economist, June 4, 2009.		
15	Supply Chain Simulation Game			
16	FINAL EXAM			

Learning Outcomes

Global Supply Chains and Logistics is designed for inclusion in the Foundations of Social Inquiry category of FIU's core curriculum. In order to be included in this category, courses must address the following competency:

• Students will be able to use research and analytic skills to evaluate and apply theories and methodologies.

This course addresses this competency through the course content, student learning outcomes, assessments, and learning activities. Additionally, as part of the Global Learning curriculum, the course addresses those outcomes. The following table show the course outcomes with respect to the university core curriculum.

Core Curriculum Outcomes	Assessment
1. Understand the diverse evolution and socio- cultural meanings of the trade systems, including ceremonial trade, imperial trade, mercantile trade, colonial trade, cold war, and neo-liberalism/Washington Consensus.	Individual quiz and team quiz
2. Explore the history, application and debates around key trade concepts such comparative advantage, spatial division of labor, alienation of labor, and externalities and how this affects the design of global supply chains	Individual quiz and team quiz Research paper. The students will be asked to write a paper by selecting a global supply chain and investigating the history that influenced its current configuration, how comparative advantage, labor practices, and other social and political factors influenced the current design and operation of the supply chain. Simulation: Teams will demonstrate their understanding of how the history and theories of trade influence global supply chain design and evolution (e.g., location decisions, transportation decisions, product design, and other supply chain design issues).
3. Be able to compare and contrast different perspectives on trade such as neoclassical/modernization, dependency theory/ISI, fair trade, environmental economics, new economic geographies, slow/local and bottom of the pyramid.	Individual quiz and team quiz Team-based activity: Teams will compare and contrast at least three different trade perspectives along various dimensions provided in class.