RARITAN VALLEY COMMUNITY COLLEGE ACADEMIC COURSE OUTLINE

BUSI 115: Transportation & Supply Chain Management

I. Basic Course Information

A. Course Number and Title: BUSI 115: Transportation & Supply Chain Management

B. New or Modified Course: Revised

C. Date of Proposal: Semester: Fall 2017

D. Effective Term: Fall 2018

E. Sponsoring Department: Business & Public Service

F. Semester Credit Hours: 3

G. Weekly Contact Hours:

Lecture: 3 hours

Laboratory: None

Out of class student work per week: 6 hours per week

H. Prerequisites/Corequisites: N/A

I. Laboratory Fees: N/A

J. Name and Telephone Number or E-Mail Address of Department Chair and Divisional Dean at time of approval: Anne Marie Anderson, <u>AnneMarie.Anderson@raritanval.edu</u> Terence Lynn, Terence.Lynn@raritanval.edu

II. Catalog Description

This course will provide an overview of transportation as it relates to supply chain management. Students will learn about the different transportation modes and how an intermodal system moves raw material and finished goods efficiently, safely, and securely. The role of federal programs and agencies in setting current transportation laws, regulations, and policies will also be explored.

III. Statement of Course Need

- A. Transportation is the component of supply chain management that focuses on how and when to get raw materials, intermediate products, and finished goods from their respective origins to their destinations. An efficient, responsive transportation network is critical to an effective supply chain. Supply chain management is integral to increasing an organization's efficiency, capacity, and cash flow. Supply chain management also addresses the increasing demands of sustainability and corporate social responsibility. There is employment demand at all levels of supply chain management.
- B. No lab component
- C. This course generally transfers as a free elective or business elective.

IV. Place of Course in College Curriculum

- A. Free Elective
- B. Business Elective
- C. This course meets a program requirement for the Supply Chain Management Option in Business Administration (AS) and the Supply Chain Option in Business Management (AAS)
- D. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org; b) for all other colleges and universities, go to the individual websites.

V. Outline of Course Content

- A. Role and Importance of Transportation
 - 1. Current and Future Transportation Systems
 - 2. Global Supply Chains
 - 3. Challenges
 - 4. Opportunities
- B. Transportation and the Economy
 - 1. Transportation and Economic Development
 - 2. Transportation and Price of Goods
 - 3. Transportation and Impact on Regions

4. Transportation Industry

C. Transportation Regulation and Public Policy

- 1. National Transportation Policy
- 2. Regulation of Transportation in the United States
- 3. Transportation Safety and Security Regulations

D. Costing and Pricing for Transportation

- 1. Relationship between Rate and Price
- 2. Strategic Role of Pricing

E. Motor Carriers

- 1. Development and Contributions to the U.S. Economy
- 2. Market Forces Shaping the Industry
- 3. Current Issues facing Motor Carrier Industry

F. Railroads

- 1. Railroads and the U.S. Economy
- 2. Types of Firms in Railroad Industry
- 3. Intermodal and Intramodel Competition
- 4. Major Types of Commodities
- 5. Nature of Costs and How Costs Impact Pricing
- 6. Intermodal Carloadings
- 7. Current Issues in Railroad Industry

G. Airlines

- 1. Air Transportation and the U.S. Economy
- 2. Competition in the U.S. Airline Industry
- 3. Economies of Scale and Density in Airline Industry
- 4. Current Issues facing Airlines

H. Water Carriers and Pipelines

- 1. Overall Importance of Water Carrier System
- 2. Types of Water Carriers
- 3. Challenges and Issues in 21st Century
- 4. Cost Structure and Rates of Pipelines

I. Transportation Risk Management

- 1. Transportation Risk and Disruptions
- 2. Key Factors in Risk Assessment
- 3. Four Techniques for Managing Transportation Risks
- 4. Transportation Security Regulations and Initiatives

J. Third Party Logistics

- 1. Importance and Types of Third Party Logistics Providers
- 2. Lean Warehousing
- 3. Third Party Logistics Market

- 4. Current Challenges and Competitive Issues in the 3PL Industry
- K. Private Transportation/Fleet Management
 - 1. Private Transportation Companies
 - a. Legal Basis
 - b. Various modal types
 - c. Cost Structure
 - 2. Challenges with Daily Operations of a Private Fleet

VI. General Education and Course Learning Outcomes

A. General Education Learning Outcomes:

At the completion of the course, students will be able to:

- 1. Communicate (orally and in writing) with others in a clear, logical manner on projects. (GE-NJ1)
- 2. Identify the ethical issues facing transportation in logistics. (GE-NJ ER)
- 3. Apply concepts of transportation (modes, laws, regulations) as it relates to supply chain management. *

(*Embedded critical thinking)

B. Course Learning Outcomes:

At the completion of the course, students will be able to:

- 1. Examine the role of transportation in logistics and global supply chain management.
- 2. Evaluate the cause and effect of major U.S. Transportation Policy and Regulations.
- 3. Compare different modes of transportation (motor, rail, air, pipeline and water) as used in the supply chain.

C. Assessment Instruments

The following assessment methods may be used:

- A. Essays
- B. Projects
- C. Research papers
- D. Exams
- E. Presentations (Required)
- F. Case Studies

VII. Grade Determinants

- A. Essays
- B. Projects
- C. Exams
- D. Presentations
- E. Research papers
- F. Case Studies

Modes of teaching and learning that may be used:

- A. lecture/discussion
- B. small-group work
- C. guest speakers
- D. student oral presentations
- E. student collaboration

VIII. Texts and Materials

- A. Transportation: A Global Supply Chain Perspective 8th edition Coyle, Novack, Gibson (2016) Boston, MA: Cengage Learning
- B. Internet Resources.

Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.

IX. Resources

A. N/A