

# Institutional Syllabus - GBTT 251-01 Transportation Systems

# Spring 2020

James Drogan 12/17/2019

#### 1. COURSE DESCRIPTION

GBTT 251 Transportation Systems 3 class hours, 3 credits. This course presents an overview of the global transportation systems that help integrate our world, including their operation, design, and the economic factors that help drive and influence the supply chains of which they are a part. This course is the first in a sequence of two courses, the other being GBEC 428 Economic Geography, that integrates the presentation and learning of three elements primary to contemporary transportation:

1) system design, organization, and control; 2) global environments and factors, including culture and ethics, that influence transportation processes and activities; and 3) the economics of transportation, including the effects of demand and supply, private sector costing and pricing strategies, and government regulation at all levels.

3.000 Credit hours

3.000 Lecture hours

Prerequisite(s): GBUS 100

Corequisite(s): None

Follow-On Courses: GBEC 428 Economic Geography

Role in Curriculum: Major course

#### II. TEXT(S)

# A. Required Text(s):

- 1. Coyle, J. J., Novack, R. A., Gibson, B., & Bardi, E. J. (2010). *Transportation: A Supply Chain Perspective* (7th ed.). South-Western Cengage Learning. 0-324-78919-X. Chapter 3 is required for course module 4; chapters 5, 6, and 8 are required for course module 6; chapter 10 is required for course module 10.
  - a. You may find of interest the following option since only five chapters are required from this text for this course
    - (a) Point your browser at *Cengage Learning > Higher Education* at http://www.cengage.com/search/showresults.do?N=16&iba=W150089 46
    - (b) Enter the ISBN number (0-324-78919-X) in the search box.

- (c) To the right of the resulting screen you will see a box labeled *Purchase at CENGAGE brain*. Click on the *View* button in that box and you will be presented with a screen labeled *Purchase Options*.
- (d) Make your selection and complete the transaction.
- 2. Stutz, F. P., & Warf, B. (2012). *The World Economy: Geography, Business, Development* (6th ed.). Saddle River NJ: Pearson Education. 0-321-72250-7. Chapter 1 is required for course module 1; chapter 9 for course modules 3, 4, and 5; chapter 13 for course module 9; chapter 14 for course module 13.

Please note that this text is also used in GBEC 428.

- a. You may find the following of interest since only four chapters are required from this text for this course.
  - (a) Point your browser at *myPearsonstore* at <a href="http://www.mypearsonstore.com/index.asp">http://www.mypearsonstore.com/index.asp</a>
  - (b) Choose your country
  - (c) Enter the ISBN number, 0-321-72250-7, in the box labeled *Find Book*, then click *Search*.
  - (d) On the resulting screen you will see a box giving you two choices for digital and one for print.
  - (e) Make your selection and complete the transaction.
- 3. These texts are on reserve in the Luce library.
- B. Supplemental Material:

Distributed through Blackboard

Please note that is a blended course wherein a learning management system, Blackboard, complements the classroom experience.

- III. BS in International Transportation and Trade Program Student Learning Outcomes
  Upon successful completion of the BS in ITT, the student will be able to:
  - A. Make rational business decisions by identifying issues, formulating hypotheses, collecting data and employing business decision-support tools.
  - B. Demonstrate and illustrate leadership skills
  - C. Demonstrate the ability to communicate persuasively
  - D. Apply ethical standards to business
  - E. Discuss and interpret the dynamic issues of international transportation and trade
  - F. Demonstrate the basic principles, skills, and tools of international transportation and trade

#### IV. STUDENT LEARNING OBJECTIVES

# A. Course Objectives

Upon successful completion of GBTT 251, the student will:

- 1. Have the perspective, information, tools, and techniques that enable an understanding of transportation in the past, present, and future tenses.
- 2. Be able to use this understanding as the basis to deliver value by suggesting improvements to current and future systems.
- 3. Be able to apply the principles of critical thinking and communicate the results of this analysis.

#### IV. COURSE ASSESSMENTS

- A. Assessments in the Class (194 total points)
  - 1. Deliverable Points (120) Late papers will not be accepted.
  - 2. Attendance Points (56) Three or more unexcused absences will result in failure.
  - 3. Team Assessment Points (18) Failure to submit a team assessment will cause you to receive zero (0) for the team grade.
- B. External Assessments

Performance in follow-on course(s)

#### V. ACCOMMODATIONS FOR STUDENTS WITH LEARNING DISABILITIES

If you believe that you need accommodations for a disability (also referred to as IEPs and 504 plans), please notify me within the first week of class and contact the Office of Accessibility Services at (718) 409-7348 or email Associate Dean William Imbriale at wimbriale@sunymaritime.edu for an appointment to discuss your needs and the process for requesting accommodations. Since accommodations may require early planning and generally are not provided retroactively, please contact Accessibility Services as soon as possible!

Absolute integrity is expected of every Maritime student in all academic undertakings.

A Maritime student's submission of work for academic credit indicates that the work is the student's own. All outside assistance should be acknowledged, and the student's academic position truthfully reported at all times. In addition, Maritime students have a right to expect academic integrity from each of their peers.

Students are expected to do their own work in class, on assignments, laboratory experiments, and examinations or tests in accordance with the directions given by the instructor. It is the responsibility of all students to read and understand this statement of College policy on academic integrity. Maritime College considers the violation of academic integrity a serious matter, and one that will be treated as such.

A student who violates academic integrity may, depending on the nature of the offense, be subject to one or more of the following measures: failure of the assignment or examination, failure of the course, dismissal from the Regiment of Cadets, or dismissal from the College. Violations of academic integrity, also known as academic dishonesty, are subject to review by the Judicial Board. For details, go to:

http://www.sunymaritime.edu/sites/default/files/media/Documents/AcademicIntegrity Policy.pdf

 $\frac{\textbf{ALL ACADEMIC INTEGRITY VIOLATIONS WILL BE REPORTED TO THE DEAN OF}{\underline{\textbf{STUDENTS}}}$ 

# Course Syllabus – GBTT 251-01 Transportation Systems Spring 2019

#### INSTRUCTOR INFORMATION

Prof. James Drogan, jdrogan@sunymaritime.edu, 718-409-7289

Office hours: 9AM – 3PM Mondays through Thursdays MAC 228.

#### **CLASS MEETINGS**

1130AM – 1245PM, Monday and Wednesday

**MAC 110** 

#### **CLASS POLICIES**

Attendance is mandatory. **Three or more unexcused absences will result in failure.** Please notify the instructor by any available means if you expect to be absent.

Smartphones and laptops may be used during class if the use is for purposes of the class. This privilege will be rescinded if there is a substantial amount of unauthorized use.

#### **GRADING SUMMARY**

Deliverable Points	120	62%
Attendance Points	56	29%
Team Assessment	18	9%
Total	194	100%

No makeup work will be assigned and extra credit is unavailable.

Three or more unexcused absences will result in failure.

Late papers will not be accepted.

Failure to submit a team assessment will cause you to receive zero (0) for the team grade.

Details of grading will be found on p Error! Bookmark not defined..

# Final Grade Assignments

The initial final grade is assigned according to the following table.

%	GPA	Grade
100.0%	4	Α
93.0%	4	Α
90.0%	3.7	A-
87.1%	3.3	B+
83.0%	3	В
80.0%	2.7	B-
77.1%	2.3	C+
73.0%	2	С
70.0%	1.7	C-
67.1%	1.3	D+
63.0%	1	D
0.0%	0	F

The initial final grade represents the points attained divided by the total points available. The resulting percentage guides me in the assignment of the final grade. What this means is that the final grade I assign may be different from the mathematical grade. In assigning the final grade I take into account your consideration, respect, and encouragement of others; your desire for learning and discipline in completing the assignments; your ability to bring relevant issues to the attention of the class.

#### COURSE OUTLINE

#### Overview

Transportation systems connect centers of economic activity. These centers may be sources of supply and demand for products and services and/or centers, such as an airport, where goods and services transfer within and between modes. A transportation system does not exist alone; it requires a means of management in order to produce the desired outcome, and a means of regulation to insure it operates within the bounds of accepted legal, economic, and social principles. We can't really discuss transportation systems without mention of management and regulation. However, in this course the principal focus will be on the physical system. Other courses of study take up management and regulation in more detail.

# Key points include:

- Transportation systems ameliorate the effects of economic geography thereby enabling the wellbeing of mankind.
- Transportation management allocates and control resources thereby enabling effective and efficient transportation systems.
- Transportation regulation establishes the means for controlling the excesses of mankind for the purpose of maximizing the well-being of the majority.

The course begins with an examination of how centers of economic activity developed, how this shaped the transportation system, the impact

of the industrial, technological and information ages, and how developments in these ages overcame the restrictions of geography.

The second third of the course focuses on the three primary transportation modes -- trucks, railroads, water -- their similarities and differences, the manner in which modes can be combined to improve the customer experience, and the challenges presented by globalization.

The last portion of the course takes up the matter of future transportation systems including potential services, and their design, implementation and operation.

The aim of this course is to provide you with the perspective, information, tools, and techniques that enable an understanding of transportation in the past, present, and future tenses. This understanding provides the basis for you to deliver value to by suggesting improvements to current and future systems.

# Course Design

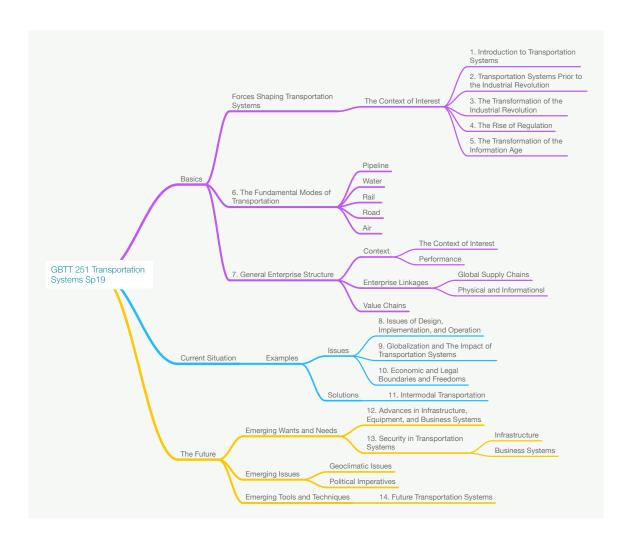
The course comprises 14 modules, each of which is, in general, taught over two course periods.

Wednesday is the first period and introduces the topic of the module through a moderated discussion. At the conclusion of the first period you will be assigned reading and writing. The reading builds upon the discussion and the writing asks you to apply what you have learned from the discussion and reading to a specific issue. The reading and writing is to be completed 24 hours before the beginning of the second period (Monday) in the module. **Written assignments that are late will not be accepted.** 

Writing Papers in GBTT 251 describes the format for these papers. This document is accessible from the course navigation panel. **This is assigned reading**.

Monday, the second period of the module comprises feedback on the written assignment and a discussion of a contemporary topic in transportation.

The next page shows a graphical overview of the course.



#### The Modules

A description of the objective for each of the modules is given along with the assigned reading. The principal texts are Coyle and Stutz. Lecture notes and links to other material will be on Blackboard.

The module numbers correspond to the module numbers in the learning management system.

# 1. Introduction to the Course and to Transportation Systems

# a. Description

An introduction to the course structure, objectives, activities, and assessments. An introduction to Blackboard, the learning management system through which material will be distributed and assignments will be submitted. Transportation systems, including their context, are outlined as well as the manner in which they will be studied and the approach for assessing student performance.

#### b. Reading

Economic Geography: An Introduction (Stutz & Warf, 2012, Chapter 1)

Ethics, Critical Thinking, and Communications (Drogan, 2009a)

Writing Papers in GBTT 251 (Drogan, 2016)

*The Value of Introspection* (Drogan, 2009b)

Teams (Drogan, 2016)

#### c. Writing

No assignment

# 2. Transportation Systems Prior to the Industrial Revolution

# a. Description

Transportation systems have a long history. The fundamentals that gave rise to transportation systems -- linkage of economic centers of activity, demand, supply, place and time utility -- continue to shape transportation systems. History is ignored at peril.

"What's past is prologue." William Shakespeare, The Tempest.

"Those who cannot remember the past are condemned to repeat it." George Santyana.

#### b. Reading

A Splendid Exchange (Bernstein, 2008, sec. Introduction)

The Silk Road ("Silk Road," 2011)

Transportation Basics (Drogan, 2007a)

#### c. Writing

The Relative Advantages and Disadvantages of the Silk Road(s)

Please write about the strengths and weakness of each of the two routes, land and water, relative to one another.

#### 3. The Transformation of the Industrial Revolution

#### a. Description

The Industrial Revolution provided innovations, steam and canals come to mind, that overcame the tyranny of geography and resulted in the onset, in a significant way, of globalization.

# b. Reading

*Transportation and Communications* (Stutz & Warf, 2012, pp. 245–251 to General Properties of Transportation Costs)

Industrial Revolution (Hackett, 1992)

#### c. Writing Assignment

The Impact of the Industrial Age on Transportation

The reading, *Industrial Revolution (Hackett, 1992)*, makes a broad sweep across the Industrial Age identifying the significant developments of the era. One might well argue that all of these, in one-way or another, affected transportation. For our purposes, however, which development do you think had the most impact? Why do you think this?

Please write on these two questions.

# 4. The Rise of Regulation

# a. Description

Success tends to breed both hubris and greed resulting in man taking unfair advantage of his fellow man. Consequently, regulation of various types results. Regulation has both benefits and costs. Some of each are planned for and achieved; others of each are unexpected, welcomed, and sometimes, endured.

# b. Reading

*Transportation and Communications* (Stutz & Warf, 2012, pp. 251–254 to Personal Mobility in the United States)

*Transportation Regulation and Public Policy* (Coyle, Novack, Gibson, & Bardi, 2010, pp. 56–66)

# c. Writing

Discuss the implications of the first sentence in the sixth full paragraph on page 59 of Coyle et.al.

What happens when terms are "vague?"

# 5. The Transformation of the Information Age

# a. Description

While the tyranny of geography was largely overcome in the industrial age, transportation systems encountered another barrier, that of information. This barrier began to be overcome with the onset of the information age (circa 1960¹) and the pursuit of two fundamental goals. The first is that everything important is visible. The second is that everything to be managed is reachable. This course considers this the second of the three ages that have radically transformed transportation.

The references here is to the Southern Pacific Railroad and its development of the Total Operations Processing System (TOPS). See https://en.wikipedia.org/wiki/TOPS. American Airlines began the development of a seat reservation system (SABRE) in the early 1950s. See https://en.wikipedia.org/wiki/Sabre (computer system).

#### b. Reading

*Transportation and Communication* (Stutz & Warf, 2012, pp. 256–269 begin with Telecommunications)

#### c. Writing

Information Technology in a Transportation System

There are many critical pieces of data that inform us of the state of the transportation system and allow us to be affected by affect the state of that system.

Pick one such piece of data. Identify why it is important, how you would capture the data, how you would process it, and what would you do with the result.

As an example, consider EZ-Pass. EZ-Pass captures your tag number as you go through the toll, calculates the amount you should be charged for that passage, and debits your account. Please do not use this example in your paper.

# 6. The Fundamental Modes of Transportation

# a. Description

There is general acceptance of five modes of freight transportation; air, pipeline, railroad, truck, and water. Each of these modes presents a different set of capabilities to the market. The three most significant modes, based on volume, are railroad, truck, and water. These are covered in some detail.

#### b. Reading

*Truck* (Coyle et al., 2010, pp. 163–177)

Railroad (Coyle et al., 2010, pp. 195–223)

Water (Coyle et al., 2010, pp. 256–269)

#### c. Writing

Moving Newsprint from Vancouver to San Diego

Assume there to be a plant in Vancouver BC Canada that produces newsprint that has been purchased for use in a printing plan in San Diego CA.

Write about the principle considerations required to select a suitable mode of transportation from the origin to the destination.

If you are unsure of the location of Vancouver and San Diego, and what the two locations have in common, consult a map. Limit yourself to the three major modes we have discussed.

# 7. General Enterprise Structure

# a. Description

Transportation systems are a collection of interlinked mobile and fixed assets structured for a particular purpose to achieve goals and objectives through being subject to a combination of people, processes, and information that direct the acquisition, deployment, control, and retirement of the assets

# b. Reading

Introduction to Transportation Systems (Sussman, 2000, Chapter 1)

Note on Building a Management System (Drogan, 2005)

# c. Writing

Three modes – railroad, truck, and water – are the focus of this course. Select one of these modes and describe the major processes required for this mode to be successful.

#### 8. Issues of Design, Implementation, and Operation

# a. Description

Transportation systems, both real and virtual, are a combination of what is permitted within geoclimatic constraints and the ambitions of those seeking to connect centers of economic activity thereby satisfying demand with supply whilst providing economic benefit. Transportation systems are a product of increasingly sophisticated thinking regarding design, implementation, and operation.

# b. Reading

Networks (Drogan, 2007)

Introduction to System Design and Control (Drogan, 2008)

# c. Writing

Describe a transportation system that will move a BMW manufactured in Berlin, Germany to a customer in Virginia, Illinois.

# 9. Globalization and the Impact of Transportation Systems

# a. Description

The third major age that is transforming transportation systems is globalization, the growing interdependency amongst nations and people of the world. There is, in a sense a growing co-dependence between globalization and transportation. This trend is not likely to lessen over the near future

Globalization is the free, fast, reliable worldwide movement of products, services, money, information, ideas, news, culture, and people. This movement is motivated by the desire to increase value whether it is

product exported from one country to another, or people migrating from one region of the world to another.

Transportation enables globalization, and it is globalization that creates the demand for transportation.

#### b. Reading

International Trade Patterns (Stutz & Warf, 2012, Chapter 13).

No Ordinary Disruption: The Four Global Forces Breaking All the Trends (Dobbs, Manyika, & Woetzel, 2015, sec. An Intuition Reset)

The Anatomy of a Taco (Schwartz, 2010)

#### c. Writing

Globalization and the Impact of Transportation Systems

Assume the overall goal of globalization is to improve the wellbeing of society. Write about one thing that transportation can implement to affect this outcome.

#### 10. Economic and Legal Boundaries and Freedoms

# a. Description

Transportation systems exist with the context of a dynamic economic and legal context. The freedoms to operate within boundaries are set at the local, state, regional, national, and international level.

'Adrian Gonzalez...ARC Advisory Group, estimated that a typical cross-border shipment involves the accurate completion and filling of 35 documents, interfacing with 25 parties including customs, carriers and freight forwarders, and complying with over 600 laws and 500 trade agreements that are constantly changing.' (Cottrill, 2003, p. 17)

# b. Reading

Global Transportation Planning (Coyle et al., 2010, pp. 331–344)

The World Trade Organization in Brief (The World Trade Organization in Brief, 2009)

# c. Writing

Free Trade and Global Regulation

In a complex and rapidly changing world regimes are necessary to hold back chaos. Discuss a regime you consider to be essential for control. What are its main goals? Who should participate?

# 11. Intermodal Transportation

# a. Description

If a single mode could provide all the capabilities required to meet global needs, then, quite likely, only one mode would exist. Each of the three

major modes has strengths and weaknesses. Often the strengths of one mode offset the weakness of another mode. Inevitably one is led to combining the strengths of the modes to overcome the weaknesses of the modes in order to provide higher levels of economic value to the users of the transportation systems.

#### b. Reading

Global Transportation Planning (Coyle et al., 2010, pp. 344–349)

Intermodal Transportation (Rodrigue, Slack, & Comtois, 2011)

# c. Writing

Seatrain Louisiana

You will find this ship model in the Maritime Museum.

Please describe its purpose in the context of intermodal transportation. Are there any existing examples of this sort of ship in service?

# 12. Advances in Infrastructure, Equipment, and Business Systems

#### a. Description

Man is a restless animal, always on the prowl for new and better ways of thinking and doing. This translates into advances in transportation infrastructure and equipment, of which the container is perhaps the most significant example, and of business systems, of which the business system essential to Amazon fulfillment are perhaps the most significant example. These advances fundamentally transform the transportation system.

#### b. Reading

The Driverless Truck is Coming, and It's Going to Automate Millions of Jobs (Petersen, 2016)

How and Why They Are Raising the Bayonne Bridge Roadway (O'Connell, 2014)

#### c. Writing

Your idea for an advance in infrastructure, equipment, or business system.

Describe an idea you have for an improvement in transportation infrastructure, equipment, or business system. What do you think its impact might be?

#### 13. Security in Transportation

#### a. Description

Transportation is one of the critical systems that enables global development and growth leading to improvement in the human condition. Transportation is also one of the most complex systems that man has devised (or sometimes stumbled in to) and as complexity grows the less

we understand and the more difficult becomes the task of managing the system.

Instances of disruption to the system – sometimes by natural causes and other times through mistakes or deliberate efforts on the part of the human component of the system – abound. It would seem that these increase in frequency and impact as time develops.

The current and emerging situation demands action to prevent and recover from these disruptions.

# b. Reading

Global Trade and Total Security Management (Ritter, Barrett, & Wilson, 2012, Chapter 1)

### c. Writing

Assessment of a Vulnerability in the Transportation System

The concept of The Everythings has been discussed in this course. Select an everything that you consider vulnerable to disruption that would have a significant impact on the transportation system. Describe the nature of the vulnerability and its impact on the system. Suggest an approach to preventing the disruption.

# 14. Future Transportation Systems

# a. Description

The further one pushes beyond today, the more unfamiliar the territory. The age of the rotary phone restricted one to an area defined by the length of the cord connecting the microphone and earpiece to the cradle has given way to the smartphone where almost anything is possible at anytime from anyplace. The "anys" are a modern mantra. There is every reason to think that any product may someday be available at anytime and anyplace to anyone. Making this possible will be the transportation system responding to, and perhaps provoking, the needs and wants of the global citizen. There is the anticipation of significant advancements in transportation systems, the most significance of which may be in the roles, responsibilities, risks, and rewards associated with the most critical of components, the human.

# b. Reading

None

# c. Writing

None

# **SCHEDULE**

Date	Day of Week	Торіс	Deliverable Due	Deliverable Points	Attendance Points
1/6/20	Monday	1. Introduction to Transportation Systems and the Course			2
1/8/20	Wednesday	2. Transportation Systems Prior to the Industrial Revolution			2
1/13/20	Monday	Paper 1	1/12/20	10	2
1/15/20	Wednesday	The Lonely Wednesday			2
1/20/20	Monday	Martin Luther King Day - NO CLASSES			
1/22/20	Wednesday	3. The Transformation of the Industrial Revolution			2
1/27/20	Monday	Paper 2	1/26/20	10	2
1/29/20	Wednesday	4. The Rise of Regulation			2
2/3/20	Monday	Paper 3	2/2/20	10	2
2/5/20	Wednesday	5. The Transformation of the Information Age			2
2/10/20	Monday	Paper 4	2/9/20	10	2
2/12/20	Wednesday	6. The Fundamental Modes of Transportation			2
2/17/20	Monday	President's Day - NO CLASSES - Hold Monday Classes on Tues	sday		
2/18/20	Tuesday	Paper 5	2/17/20	10	2
2/19/20	Wednesday	7. General Enterprise Structure			2
2/24/20	Monday	Paper 6	2/23/20	10	2
2/26/20	Wednesday	8. Issues of Design, Implementation, and Operations			2
3/2/20	Monday	Paper 7	3/1/20	10	2
3/4/20	Wednesday	Spring Break - NO CLASSES			
3/9/20	Monday				2
3/11/20	Wednesday	9. Globalization and the Impact of Transportation Systems			2
3/16/20	Monday	Paper 8	3/15/20	10	2
3/18/20	Wednesday	10. Economic and Legal Boundaries and Freedoms			2
3/23/20	Monday	Paper 9	3/22/20	10	2
3/25/20	Wednesday	11. Intermodal Transportation			2
3/30/20	Monday	Paper 10	3/29/20	10	2
4/1/20	Wednesday	12. Advances in Infrastructure, Equipment, annd Business			
		Systems			2
4/6/20	Monday	Paper 11	4/5/20	10	2
4/8/20	Wednesday	13. Security in Transportation Systems			2
4/13/20	Monday	Paper 12	4/12/20	10	2
4/15/20	Wednesday	14. Future Transportation Systems			2
4/20-25/20		Finals Week			

# **GRADING**

1. Deliverable Points: Twelve (deliverables) due in this course. The grade is determined according to the following rubric.

	4 Consistently Exceeds Requirements	3 Exceeds Requirements at Times	2 Meets Requirements	1 Fails to Meet Requirements
Clear, Precise, Concise	Words and structure match the context	The words and structure match the	The words and structure do not match the	The words and structure do not match the
	and clearly convey the intent of the	context, but occasionally interfere with	context to a noticeable degree and	context nor do they permit an
	communications. Graphics are	clearly understanding in the intent of the	consistently interfere with understanding	understanding of the intent of the
	appropriate in support of the narrative.	communications. Graphics are	the intent of the communications.	communications.
		occasionally inappropriate.		
Compelling	Compels one to read and accept the	Compels one to read, but occasionally	Occasionally impedes the reading and	Substantial difficulty in reading and
	assessments, conclusions, and	causes one to question the assessments,	accepting the assessments, conclusions,	accepting the assessments, conclusions,
	recommendations included therein	conclusions, and recommendations	and recommendations included therein.	and recommendations included therein.
		included therein.		
Relevant	All aspects are relevant to the	There are a few, minor examples of	There are a few, major examples of	Examples of inattention to the
	requirements of the assignment.	inattention to the requirements of the	inattention to the requirements of the	requirements of the assignment abound.
		assignment.	assignment.	
Credible	Little to no evidence of concern.	Occasional, minor evidence that generates	Occasional, major evidence that generates	Major question of credibility.
		concern.	concern.	
	16	12	8	4

After a paper is read the description of each of the four characteristic that best matches the student work is selected. There will only be one in each row. An overall GPA number is derived and this is used to determine the points and letter grade for the assignment.

Here is an example.

	4 Consistently Exceeds Requirements	3 Exceeds Requirements at Times	2 Meets Requirements	1 Fails to Meet Requirements
Clear, Precise, Concise		The words and structure match the		
		context, but occasionally interfere with		
		clearly understanding in the intent of the		
		communications. Graphics are		
		occasionally inappropriate.		
Compelling		Compels one to read, but occasionally		
		causes one to question the assessments,		
		conclusions, and recommendations		
		included therein.		
	All aspects are relevant to the			
	requirements of the assignment.			
Credible		Occasional, minor evidence that generates		
		concern.		
	4	9	0	0

3.25 3.25 8.3

The points earned were 8.3 of 10 and the letter grade was a B

- 2. Attendance Points: It is the responsibility of the student to attend all classes. Attendance will be taken. The instructor reserves the right to fail the student in the course for more than three unexcused absences.
- 3. Team Assessment Points: Your teammates assess your contribution to the team based upon whether they would like to be on a team with you in the future. See *Teams* (Drogan, 2016) for additional information on teams.

Here is a recapitulation of the points assigned in this course.

Deliverable Points	120	62%
Attendance Points	56	29%
Team Assessment	18	9%
Total	194	100%

#### References

- Cottrill, K. (2003, March 17). Burden of Proof. Traffic World, 21.
- Coyle, J. J., Novack, R. A., Gibson, B., & Bardi, E. J. (2010). *Transportation: A Supply Chain Perspective* (7e ed.). South-Western Cengage Learning.
- Dobbs, R., Manyika, J., & Woetzel, J. (2015). *No Ordinary Disruption: The Four Global Forces Breaking All the Trends*. PublicAffairs.
- Drogan, J. (2005). Note on Building a Management System. Retrieved from http://jmsdrgn.squarespace.com/storage/Note%20on%20Building%20a%20Mana gement%20System.pdf
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  Roadway. *The New York Times*. Retrieved from

  http://www.nytimes.com/interactive/2014/03/23/nyregion/how-and-why-they-are-raising-the-bayonne-bridge-roadway.html
- Petersen, R. (2016, April 25). The Driverless Truck is Coming, and It's Going to

  Automate Millions of Jobs. Retrieved December 21, 2016, from TechCrunch

  website: http://social.techcrunch.com/2016/04/25/the-driverless-truck-is-comingand-its-going-to-automate-millions-of-jobs/

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