OPMG 489: Supply Chain Analytics
Spring Quarter 2014

Professor: Maciek A. Nowak
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Cell Phone: (678) 640-3698

I am generally always available by email. Please use my office phone when possible, but you may also call my cell phone if you can’t get me any other way or need to reach me quickly.

Class Hours: TH 6:00PM – 9:00PM
Corboy Law Center – Room 201

Office Hours: W 1:00PM – 4:00PM
TH 2:00PM – 5:00PM
Or by appointment.

Course Description: A study of the design, development, and use of decision models for analysis of supply chain problems. This course provides an example-driven approach to learn about important supply chain models, problems, and solution methodologies.

Course Overview: Develop an understanding of the issues involved in the use of decision support tools for analysis of supply chain problems. Modeling techniques are applied to a wide range of topics including facility location and network design, aggregate planning and resource allocation decisions, the integration of supply chain and demand management (benefits and costs of delayed differentiation, mass customizations), estimation of product and customer costs to determine total landed cost, and transportation analysis. Cases from business and current issues are discussed.

Course Objective: The objectives of this course are to develop valuable modeling skills that students can appreciate and use effectively, as well as reinforce their understanding of supply chain theories, principles, and concepts studied previously in foundation courses.

Course Materials: Textbook (Both Semi-Optional):
The course will utilize the Sakai system, which can be accessed at https://sakai.luc.edu/

Email will be the primary means of my contacting you outside of class. Please make sure that Sakai contains your current email address and that you check your email periodically.

Sakai will also be used as a repository for materials used in class and for posting homework assignments. Please be sure to check the Sakai web site regularly.

Class attendance and participation are fundamental components of learning, so punctual attendance at all classes, for the full class meeting period, is expected of Quinlan students. Faculty may set participation policies unique to their courses and use class participation as a component of the final grade. The student is responsible for any assignments or requirements missed during an absence.

You are expected to come to class fully prepared and willing to participate in class discussions. Prepared means that you have read the assignments, familiarized yourself with the presented theory from the previous class, given thought to the problems presented in the readings, considered how these problems could be addressed using applications of the theory presented in this class, and completed any assigned write-ups or problems. Your willingness and ability to contribute to class discussion and ask meaningful questions will be included in your class participation grade.

Attendance will be taken and is part of your participation grade. Keep in mind that missing a class is equivalent to dropping your grade by more than 0.5%. One excused absence will be allowed in the quarter. Notify the professor of this absence in advance of the class. Leaving class early on a regular basis will be noted and accounted for in your participation grade.

This class will be a mix of lectures and in class coursework. Problem solving methods will be heavily emphasized and active discussion is expected.

Assignments
Assignments in this course generally include the opportunity, and expectation, for quantitative analysis and a problem solving methodology. Your assignment write-ups should be carefully thought out and your recommendations/conclusions should be supported by analysis. Additionally, you will be graded on the clarity of your work and overall presentation. All assignments will be completed individually unless otherwise indicated. One copy should be emailed to the professor at mnowak4@luc.edu and another submitted online via Sakai.

Final Project
The final project will involve applying the various techniques developed in class on a real world analysis of the problem faced by Mike’s Hard Lemonade. This project will involve a full report and a presentation of your key results to executives at Mike’s. The project is to be completed in groups of 4 students. You may either form this group on your own, or take part in the group creation survey distributed in the first week of class. All groups must be determined by the third week of class (March 13).
The report should be a professional and formal document, including attachments containing important graphs and tables relating to your results. The decisions that your group has made, the actions that you recommend to be taken, adjustments to strategy, goals, etc. and projections for future company performance with and without your recommended actions all should be discussed in the report.

The report should also contain the following discussions:

- Describe and analyze recommended strategies, tactics and performance,
- Analyze the decision making processes of your team,
- Identify the most successful parts of your supply chain management strategy and tactics,
- Identify the one thing you would change if you were going to participate in the project again and explain your reasoning,
- Describe any limitations of your learning experience as it related to the course (including information or software that would have been beneficial to your analysis).

Grading Policy:

- Total Landed Cost Analysis 15%
- Tableau 15%
- Vanguard 15%
- Network Analysis 15%
- Final Project 30%
- Class Participation 10%

Unless otherwise announced, the following grading scale will apply to this course (rounding to the first decimal place):

A 93% and higher
A- 90-92%
B+ 88-89%
B 83-87%
B- 80-82%
C+ 78-79%
C 73-77%

Academic Integrity: All members of the Quinlan School shall refrain from academic dishonesty and misconduct in all forms, including plagiarism, cheating, misrepresentation, fabrication, and falsehood...Plagiarism or cheating on the part of the student in individual or group academic work or in examination behavior will result minimally in the instructor assigning the grade of “F” for the assignment or examination. In addition, all instances of academic dishonesty must be reported to the chairperson of the department involved.

For further information about expectations for academic integrity and sanctions for violations, consult the complete Quinlan School of Business Honor Code and Statement of Academic Integrity on the Quinlan website: http://www.luc.edu/media/lucedu/quinlanschoolofbusiness/pdfs/Honor-Code-Quinlan-July2012.pdf

Special Needs Policy:
If you have any special needs related to your participation in this course, including identified visual impairment, hearing impairment, physical impairment, communication disorder, and/or specific learning disability that may influence your performance in this course, you should meet with the instructor to arrange for reasonable provisions to ensure an equitable opportunity to meet all the requirements of this course.

**Cell Phones:** Out of respect for your fellow classmates, I ask that you please turn off (or put on vibrate) all cell phones and pagers while you are in class.

**Computer Use:** During the lecture portion of this course, the computers in the lab should not be used. This use is distracting to the instructor and fellow students, and will not be tolerated.

### Tentative Schedule

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<thead>
<tr>
<th>Class</th>
<th>Date</th>
<th>Topic</th>
<th>Textbook</th>
<th>Software</th>
<th>Assignment Due</th>
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<tr>
<td>1</td>
<td>20-Feb</td>
<td>Syllabus, Analytics Intro - Total Landed Cost</td>
<td>Chapter 1</td>
<td>Microsoft Excel and Access</td>
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<td>2</td>
<td>27-Feb</td>
<td>Project Presentation - Mike’s Hard Lemonade</td>
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<td></td>
<td>6-Mar</td>
<td>Spring Break</td>
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<td>3</td>
<td>13-Mar</td>
<td>Forecasting</td>
<td>Chapter 2</td>
<td>Vanguard</td>
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<td>4</td>
<td>20-Mar</td>
<td>Forecasting</td>
<td>Chapter 3</td>
<td>SAP</td>
<td>Total Landed Cost Analysis</td>
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<tr>
<td>5</td>
<td>27-Mar</td>
<td>Business Analytics</td>
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<td>Tableau</td>
<td>Vanguard Assignment</td>
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<td>6</td>
<td>3-Apr</td>
<td>Network Design</td>
<td>Chapter 5</td>
<td>IBM LogicNetPlus</td>
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<td>7</td>
<td>10-Apr</td>
<td>Network Design</td>
<td>Chapter 5</td>
<td>IBM LogicNetPlus</td>
<td>Tableau Assignment</td>
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<td>17-Apr</td>
<td>Easter Holiday</td>
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<td>24-Apr</td>
<td>Network Design/Project Update Meetings</td>
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<td>IBM LogicNetPlus</td>
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<td>10</td>
<td>1-May</td>
<td>Risk Management</td>
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<td>Network Analysis</td>
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<td>8-May</td>
<td>Final Project Presentations</td>
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<td>Final Report</td>
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