ETI 3647

Supply Chain Management Syllabus

Your Professor

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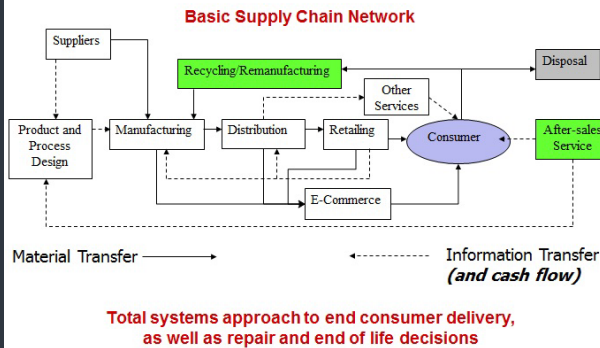Email: huehnbrown.wende@spcollege.edu

Campus Office Hours: Each Tue. 10AM to 2PM and other days (will vary). St. Pete/Gibbs Campus, TE Building Room 131A

Virtual Office Hours: Each Wed. 11:30AM to 12:30PM and other days (by apt.).

Need another day or time? Contact to schedule an apt. that fits both our schedules.

Availability: Contact via phone or email any time. Regularly available and quick to respond (not more than 24 hours).

Feedback: Quizzes open for review after submission with further feedback posted with Grades for each submission. All feedback is returned within 3 days from the due date. Always timely read feedback and ask questions to help yourself continue to learn and improve performance.

Basic Supply Chain Network

Material Transfer ⟶

Information Transfer *(and cash flow)*

Total systems approach to end consumer delivery, as well as repair and end of life decisions

What is a supply chain?

The supply chain starts with raw materials (grown, extracted, or made) and ends with final consumable or used products and services. It also considers sustainable solutions at the end of the life to recycle or reuse products in another supply chain (cradle-to-cradle). Everything you buy or use as a consumer needed a supply chain to get to you!

Course Overview

This course builds on the basic concepts learned in operations management for students to further understand how to build and implement supply chain or value chain networks. Students learn principles, processes, technologies, strategies, and analytical techniques used to integrate global supply chain management best practices. Emphasis will be on the student developing an enterprise wide and systems view to manage the flow of information, physical distribution, and revenue required to deliver products and services from raw materials through end consumer use (and reverse flow). This course will incorporate basic supply chain management, customer demand management, inventory management, supplier relationship management, and logistics management as they relate to the core aspects of this management practice.

We use much technology to manage communication, inventory, orders, transportation, and more in our supply chains which integrate different industries or stages of typically independent organizations. Supply chain decisions impact competitive abilities at an extended enterprise-level flowing products or services in complex and global systems that add value focused on satisfying customer demands and expectations. Supply chains also create financial value as without a profit for all partners or stakeholders the supply chain will struggle or become bankrupt.

Supply chain management is an interdisciplinary course that uses financing, marketing, and operating decisions. While this course requires students to complete MAN 3504 operations management to register, it is recommended that students also complete FIN 3403 financial management and MAR 3802 marketing management before this class.

This course uses a variety of multi-media to learn the various tools and techniques used in supply chain management. This includes texts, images, audios, videos, handouts, e-books, website links, news articles, case studies, and other resources for students to learn best practices for supply chain management. As covered in the Syllabus, all materials are subject to copyright law and only available for use in the course (cannot be shared elsewhere).

As students continue to grow their careers, this field of study is linked to many exciting career opportunities! Each business enterprise, whether a sole proprietor or a major corporation, a for-profit or not-for-profit, is part of one or more supply chains. Just about every job and business needs to manage different supply chain decisions and this knowledge may offer further career advancement opportunities and/or support for new business development plans.

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Required Materials

There is NO textbook or publisher lab. Everything is built in the Course Content weekly lessons.

Learn to navigate the Course Content to support your success: https://youtu.be/QhaZscB5-g8. This video is in the Start Here – Introduction pre-requisite action item.

Students should have regular access to a computer connected to the Internet. When viewing online videos or completing online assignments the connection needs to be stable. Students without should consider alternative arrangements.

All submissions should be completed with Microsoft Office (i.e. Excel). Students can get the software for Windows or Mac FREE in MySPC: https://www.spcollege.edu/microsoft.
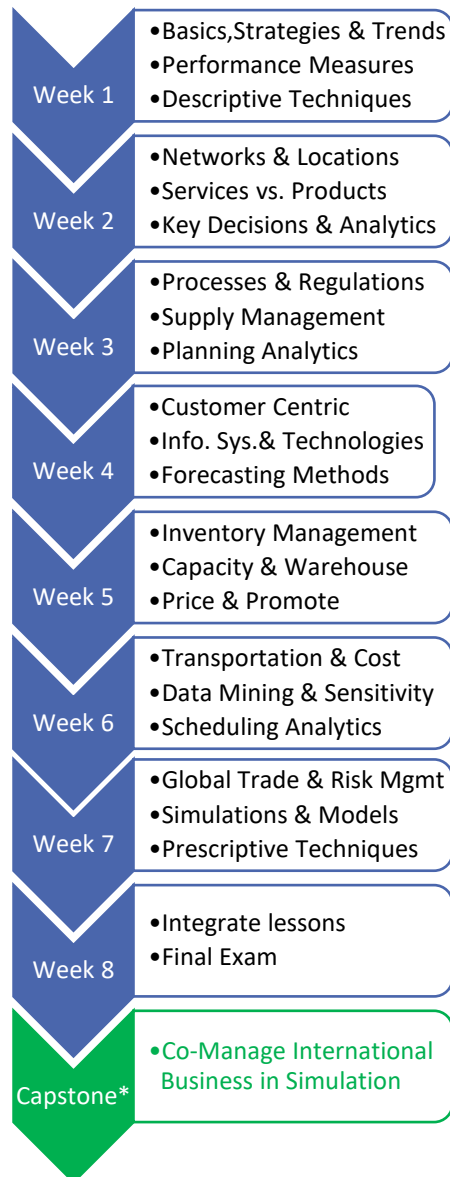
Students should download Adobe Acrobat Reader to best use PDFs: https://get.adobe.com/reader/.

Use of POM for Windows or Excel OM from pre-requisite MAN 3504 OM.

Access to web camera and microphone is needed for video intro.

Weekly Learning Objectives

The Course Content includes the modules to support these learning objectives:

Week 1
- Basics, Strategies & Trends
- Performance Measures
- Descriptive Techniques

Week 2
- Networks & Locations
- Services vs. Products
- Key Decisions & Analytics

Week 3
- Processes & Regulations
- Supply Management
- Planning Analytics

Week 4
- Customer Centric
- Info. Sys.& Technologies
- Forecasting Methods

Week 5
- Inventory Management
- Capacity & Warehouse
- Price & Promote

Week 6
- Transportation & Cost
- Data Mining & Sensitivity
- Scheduling Analytics

Week 7
- Global Trade & Risk Mgmt
- Simulations & Models
- Prescriptive Techniques

Week 8
- Integrate lessons
- Final Exam

Capstone*
- Co-Manage International Business in Simulation

* The next course in your journey towards graduation!

Each week builds on prior weeks. Students need to plan time to assure they successfully complete each sub-module as later sub-modules will need that knowledge and skill. It is also vital to learn from the feedback provided on each submission to avoid repeating issues and further growing knowledge, skills, and abilities that apply in later submissions too.

Students need to complete the MyCourses Course Content to support success on submissions (i.e. closely read, watch, take notes, plan time to study, etc.). The Course Content substitutes for a traditional textbook. Each week sub-modules group key concepts, tools, techniques, and other best practices that have evolved in supply chain management to support the course learning objectives.

This course also has weekly math, or analytic assignments associated with how decisions are evaluated to support the course learning objectives. These assignments include a set of tutorials with a practice problem scenario that builds over the course so students can see how the lessons apply in realistic business situations. Then students will need to demonstrate their mastery of the analytics in an assessment that requires them to critically think how to apply the same analytical methods in a new situation or scenario. This assignment encourages students to grow further Microsoft Excel skills to support learning the analytical methods.

This course has a final comprehensive exam due early in Week 8 (Wednesday at 11:55PM). This final exam uses similar questions from the weekly submissions.

* This course is also offered in SPC's Supply Chain Management Advanced Technical Certificate program. This certificate does not require the Capstone simulation. Students may want to talk to their advisor about completing this upper-level certificate with their bachelor's degree too.

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Submissions

See MyCourses Calendar for specific dates. Set MyCourses Notifications (text or email) to help yourself stay on track. The Start-Here module includes this schedule in an Excel file with dates.

All submission deadlines are 11:55PM (EST). Each week plans a minimum of 15-18 hours for learning standards and articulation needs. Due dates are not start dates, so work to plan your time each week to support milestone deadlines.

Late submissions may be accepted with a documented excuse (i.e. family death certificate, doctor's note, etc.). Flexibility may be granted due to illness or other challenges. Contact your professor to discuss your needs. Advance notice should be provided to arrange alternative needs. Late submissions should be complete within one week from the original due date.

Alterations may be made to the schedule as the need arises in the judgement of the professor.

Follow MyCourses Course Content for each

Weekly Schedule

Week #	Action Item	Points	Additional Instructions	Due Date
1	Start Here - Introduction		Course Content - Meet Professor, Syllabus, Additional Links & Resources, Course Design (video opens Introduction Quiz), SCM Study Tips	Wednesday
1	Introduction Quiz	5	Introduction - Earn ≥ 90% on Quiz (opens Week 1-8)	Wednesday
1	Issue 1.0 - Week 1 Highlights		Week 1 Course Content - Read (included in 1.1 assessment)	Wednesday
1	1.1 Basics - Review	10	Week 1 Course Content - Watch/Read and includes assessment	Saturday
1	1.2 Strategies & Trends	10	Week 1 Course Content - Watch/Read and includes assessment	Saturday
1	1.3 Performance Measures	10	Week 1 Course Content - Watch/Read and includes assessment	Saturday
1	1.4 Analytics - Descriptive Techniques	20	Week 1 Course Content - Watch/Read add Apply (Excel Data Analysis Toolpak, descriptive statistics, chart)	Sunday
1	1.5 Additional Case Studies		Week 1 Course Content - Watch/Read	Sunday
2	Class Introductions	5	Week 2 Course Content - Read and post video intro with replies	Wed. & Fri.
2	Issue 2.0 - Week 2 Highlights		Week 2 Course Content - Read (included in 2.1 assessment)	Wednesday
2	2.1 Networks - Designs	10	Week 2 Course Content - Watch/Read and includes assessment	Saturday
2	2.2 Services vs. Products	10	Week 2 Course Content - Watch/Read and includes assessment	Saturday
2	2.3 Key Supply Chain Decisions	10	Week 2 Course Content - Watch/Read and includes assessment	Saturday
2	2.4 Analytics - Networks/Locations	20	Week 2 Course Content - Watch/Read and apply (Weighted Scoring, Breakeven, Center of Gravity, Discounted Cash Flow, Decision Tree)	Sunday
2	2.5 Additional Case Studies		Week 2 Course Content - Watch/Read	Sunday
3	Issue 3.0 - Week 3 Highlights		Week 3 Course Content - Read (included in 3.1 assessment)	Wednesday
3	3.1 Processes & People	10	Week 3 Course Content - Watch/Read and includes assessment	Saturday
3	3.2 Sustainability & Regulations	10	Week 3 Course Content - Watch/Read and includes assessment	Saturday
3	3.3 Supply Management	10	Week 3 Course Content - Watch/Read and includes assessment	Saturday
3	3.4 Analytics - Planning	20	Week 3 Course Content - Watch/Read and apply (Supplier Selection, Aggregate Planning (S&OP), Revenue (Yield) Management)	Sunday
3	3.5 Additional Case Studies		Week 3 Course Content - Watch/Read	Sunday
4	Issue 4.0 - Week 4 Highlights		Week 4 Course Content - Read (included in 4.1 assessment)	Wednesday
4	4.1 Customer Centric	10	Week 4 Course Content - Watch/Read and includes assessment	Saturday
4	4.2 Communication & Collaboration	10	Week 4 Course Content - Watch/Read and includes assessment	Saturday
4	4.3 Information Systems & Technologies	10	Week 4 Course Content - Watch/Read and includes assessment	Saturday
4	4.4 Analytics - Forecasting	20	Week 4 Course Content - Watch/Read and apply (Moving Average, Exponential Smoothing, Regression, Trend, Seasonality, Error, Bias, Tracking Signal)	Sunday
4	4.5 Additional Case Studies		Week 4 Course Content - Watch/Read	Sunday
5	Issue 5.0 - Week 5 Highlights		Week 5 Course Content - Read (included in 5.1 assessment)	Wednesday
5	5.1 Inventory Management	10	Week 5 Course Content - Watch/Read and includes assessment	Saturday
5	5.2 Capacity & Warehouse	10	Week 5 Course Content - Watch/Read and includes assessment	Saturday
5	5.3 Price & Promote	10	Week 5 Course Content - Watch/Read and includes assessment	Saturday
5	5.4 Analytics -Pricing	20	Week 5 Course Content - Watch/Read and apply (Price Elasticity, Differential & Single Pricing, Capacity Constraints, Overbooking, Long-term Bulk vs. Spot Market, Excel Solver)	Sunday
5	5.5 Additional Case Studies		Week 5 Course Content - Watch/Read	Sunday
6	Issue 6.0 - Week 6 Highlights		Week 6 Course Content - Read (included in 6.1 assessment)	Wednesday
6	6.1 Transportation	10	Week 6 Course Content - Watch/Read and includes assessment	Saturday
6	6.2 Cost Management	10	Week 6 Course Content - Watch/Read and includes assessment	Saturday
6	6.3 Data Mining & Sensitivity	10	Week 6 Course Content - Watch/Read and includes assessment	Saturday
6	6.4 Analytics - Scheduling	20	Week 6 Course Content - Watch/Read and apply (Economic Order Quantity, Quantity Discounts, Safety Stock,Transportation Model, Supplier Comparison)	Sunday
6	6.5 Additional Case Studies		Week 6 Course Content - Watch/Read	Sunday
7	Issue 7.0 - Week 7 Highlights		Week 7 Course Content - Read (included in 7.1 assessment)	Wednesday
7	7.1 Global Trade Management	10	Week 7 Course Content - Watch/Read and includes assessment	Saturday
7	7.2 Risk Management	10	Week 7 Course Content - Watch/Read and includes assessment	Saturday
7	7.3 Simulations & Models	10	Week 7 Course Content - Watch/Read and includes assessment	Saturday
7	7.4 Analytics - Prescriptive Techniques	20	Week 7 Course Content - Watch/Read and includes assessment (Algorithms, Optimization Technologies, Business Intelligence, Machine Learning, Aritificial Intelligence, Visualizations)	Sunday
7	7.5 Additional Case Studies		Week 7 Course Content - Watch/Read	Sunday
8	Final Exam	65	Week 8 Course Content - Comprehensive (*due early*)	Wednesday

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Grading

Schedule color coding corresponds to this grade summary:

Grade Weight by Category:		
Introduction (Syllabus Quiz & Discussion Posts)	10	2.4%
Assessments (Week 1 thru 7)	210	49.4%
Analytics (Week 1 thru 7)	140	32.9%
Final Exam	65	15.3%
Total Points	425	100%

Sub-Module 1 through 3: Students have 3 attempts on concept and term assessments. Use each attempt to identify gaps or opportunities to improve comprehension (revisit course content between attempts). Use all 3 attempts to see more of the questions in the quiz pool as similar questions are used for the final exam (take this time for all 3 attempts and learn from errors to master these concepts). These assessments are timed and close at 11:55PM on Saturday with the highest grade reported.

Sub-Modules 4: Students have 1 attempt on math or analytic submissions. There is a series of tutorials to help students learn and practice the analytics used in these assignments. Follow these tutorials and build own Excel template. Ask the professor for help if you struggle on the practice problems (send your work and they can check your analysis to offer tips from the tutorials so you can revisit solution methods). The analytic assignment uses a different scenario and is not timed. These close at 11:55PM on Sunday. After the due date they are available for review. Be sure to evaluate errors to prepare for final exam (email work to professor if you need help).

Sub-Module 5: Students have additional case studies to explore to help think like a supply chain manager. All businesses need supply chains and you most likely have experienced them. Organizations urgently need more people to help manage them better!

Follow the instructions and assessment rubrics for each assignment. Students should discuss any assignment questions or grade issues directly with the professor. Total points earned for all assignments results in the final grade:

Final Grade Distribution:			
A =	382.5	to	425.0
B =	340.0	to	382.4
C =	297.5	to	339.9
D =	255.0	to	297.4
F =		<	254.9

A final grade curve may be applied at the professor's discretion. Instructors may assign an incomplete (I) grade if a student provided a documented excuse or circumstance(s) for the extension. The student must have 80% of the course completed and be considered in good standing (i.e. minimum of C). In the event of an I grade; the professor will provide the terms to complete remaining work and the student must acknowledge this plan in writing to complete the work before final grades are submitted on Friday in Week 8. After the agreed upon incomplete assignment deadline, a grade of F (or higher if the work submitted justifies) will be assigned.