

**University of North Carolina at Greensboro
 Bryan School of Business and Economics
 Department of Information Systems and Supply Chain Management**

SCM-302 Spring 2017, Section 04

OPERATIONS MANAGEMENT Syllabus



Created By	Date	
Karen Pentz	November 18, 2016	Version 01

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1.0 General Information

START DATE:

January 18, 2016

PLACE AND TIME:

Bryan 105

Wednesday 6 PM to 8:50 PM

FACULTY MEMBER:

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Department of Information Systems and Supply Chain Management

Office: Bryan 391 - Office hours by appointment only

REQUIRED COURSE MATERIALS:

The following text and on-line resources are required for this course:

- Required Textbook is Operations Management (12th edition) by Heizer and Render. You have several options for acquiring the text:
 - Purchasing a package of the 12th Edition of the text with MyOMLab access from the UNCG Bookstore
 - Purchasing the e-text with MyOMLab access from the bookstore or direct from Pearson
 - Purchasing a text from some other source, and purchasing MyOMLab access direct from Pearson
 - Purchasing the e-text with MyOMLab, with the option of later acquiring a loose-leaf version (which might be bought back)
- MyOMLab is required. You can buy it early and use the password code to access it no later than the first five days of classes! This will allow you to do your online homework assignments and the quizzes. We have a very good deal with the publisher to buy the package in the bookstore! But, if you already have an inexpensive copy of the text, simply purchase MyOMLab.
- You may access the e-text and the MyOMLab on a trial basis for 17 days. You could then determine if the e-version will work for it; it is less expensive.
- When you register for MyOMLab, use this **Course ID: [pentz26405](#)**

Important: When you register please use the same Name and email for MyOMLab as is listed in Canvas. The spelling of your name should be exactly the same (capitalization and lower case and all else). See below for information regarding MyOMLab Registration:

To register for [2017 Spring - SCM302 Section 04 - Operations Management](#):

1. Go to www.pearsonmylabandmastering.com.
2. Under Register, select Student.
3. Confirm you have the information needed, then select OK! Register now.
4. Enter your instructor's course ID: [pentz26405](#), and Continue.
5. Enter your existing Pearson account username and password to Sign In.

You have an account if you have used a Pearson product, for example: MyMathLab, MyITLab, MyPsychLab, MySpanishLab or Mastering, such as MasteringBiology.

If you do not have an account, select Create and complete the required fields.

6. Select an access option.

Use the access code that came with your textbook or that you purchased separately from the bookstore.

Buy access using a credit card or PayPal account.

If available, get 14 days temporary access (the link is near the bottom of the screen).

7. From the confirmation page, select Go To My Courses.

8. On the My Courses page, select the course title [2017 Spring - SCM302, Section 04 - Operations Management](#) to start your work.

To sign in later:

1. Go to www.pearsonmylabandmastering.com.

2. Select Sign In.

3. Enter your Pearson account username and password, and Sign In.

4. Select the course tile [2017 Spring - SCM302, Section 04 - Operations Management](#) to start your work.

To upgrade temporary access to full access:

1. Go to www.pearsonmylabandmastering.com.

2. Select Sign In.

3. Enter your Pearson account username and password, and Sign In.

4. Select Upgrade access from the course tile [2017 Spring - SCM302, Section 04 - Operations Management](#)

5. Enter an access code or purchase access with a credit card or PayPal account.

For a registration overview, go to www.pearsonmylabandmastering.com/students/get-registered.

BRIEF DESCRIPTION OF THE COURSE:

This course presents a survey of the operations functions of organizations with emphasis on the design and control decisions. This includes a study of the qualitative and quantitative problem-solving methods used to enhance managerial competence in the operations function.

CREDITS:

3.0 credit hours

PREREQUISITES:

Junior standing: ISM 110; ACCT, BADM, CARS, ENTR, FINC, INTB, ISSC, MKTG, or STHP major.

INTRODUCTION TO TOPICS COVERED:

Operations Management is the process of converting resources into products. Resources may include materials, equipment, capital, and labor. Products may include manufactured goods or services.

Operations is defined here as the set of activities directed toward the conversion of resources into goods and services. The *Management* of these resources and activities is called production/operations management (P/OM). Production/operations management is concerned with an almost unlimited spectrum of organized efforts -- from the manufacture of printed electronic circuit boards to the delivering of a social service by a local government; from the fast-food business to the health services industry. All of these involve activities directed toward the conversion of resources into products.

Production/operations management (P/OM) has, in effect, been in existence since man first organized his efforts toward productive tasks, such as hunting, farming, building and trading. More recently production/ operations management has become a defined body of knowledge since the managerial revolution beginning in the early twentieth century. Production/operations management has its roots in a number of areas of study, such as industrial engineering, materials/inventory management, manufacturing management, production scheduling, quality control, forecasting, etc. Examples of questions that are of concern in the field of P/OM are:

- How do we reduce costs in our organization, and here at UNCG?
- How do we increase our workers' productivity in The Registrar's Office?
- Are we having quality problems with our heart surgeries?
- Where should we locate our new central distribution facility at Ralph Lauren?
- What route should a caseworker follow in handling his/her caseload?
- How many iPhones should we carry in December's inventory?
- How many Honda lawnmowers will we sell next year?
- Should we work overtime in Asheboro or hire new production workers in Mexico to make more Dustbusters?
- Should we make the components ourselves or should we outsource that to a supplier in China?
- Can we afford to automate part of our production process to make more office furniture at Brayton Furniture?
- Can we afford not to automate part of our production process?
- Should we sell our manufacturing plant in Asheboro?

GENERAL COURSE OBJECTIVES

The following basic objectives represent important learning goals of the course organization and content:

- Provide a basic understanding of the production/operations function of an organization and its relationship to the rest of the organization.
- Provide a basic understanding of the major decision areas, support systems, and tools used to solve the problems and provide decision-making information for production/operations management.
- Provide an opportunity to apply some of the tools and techniques used for production/operations management problems.

COGNITIVE COURSE OBJECTIVES:

On completion of the course, students should be able to:

- Differentiate between productivity, effectiveness, efficiency, and other performance measures for operations management.
- Explain the factors that make a service operation more difficult to manage as compared to a manufacturing operation.
- Compare and Contrast the different types of conversion systems (i.e., project, job shop, batch flow, line flow, and continuous flow processes).
- Use project management techniques to plan a project.
- Develop and use a process control chart for managing quality.
- Understand the role played by total quality management in organizations.
- Distinguish between long range, intermediate range, and short-range capacity planning in operations management.
- Identify the factors that influence the location of service versus manufacturing facilities.
- Identify the important aspects and issues related to facility design decisions.
- Discuss the role of logistics in operations management.
- Understand the role of a forecasting system in the operations of an organization.
- Explain the role of strategic sourcing in the procurement of materials for operations management
- Describe the typical objectives and constraints in the aggregate planning problem related to both manufacturing and service organizations.
- Differentiate the inventory management concerns between dependent demand items and independent demand items.
- Understand the value and importance of various Lean Systems/Total Quality Management (“JIT/TQM” or “Pull”) systems and techniques.
- Discuss the role of Enterprise-wide Resource Planning (ERP) Systems in organizations in general, and supply chain/network management in particular.
- Describe how operational and supply chain processes enable firms to deliver sustainable products and services to the marketplace.

INSTRUCTIONAL METHODOLOGY:

The methods employed to achieve these objectives will vary, but include:

- Textbook reading.
- In class sessions highlighting critical textbook material.
- Homework Problems and Multiple Choice Quizzes.
- Interactive Business team projects.

In general, the overall focus for this course assumes the average student will NOT become an operations specialist, but does need to know the role of the operations manager in order to be successful in his/her own job in business, regardless of what that may be. For those of you who may wish to pursue additional courses in operations management toward a possible career in the area, this course serves as an important introduction to subsequent, more detailed course work.

Attendance: Attendance is necessary to properly understand the subject matter.

PERFORMANCE EVALUATION AND GRADING:

The following criteria will apply to the grading of assignments.

Grading Scale (%)

98.00+ = A+	93.00-97.99 = A	90.00-92.99 = A-
87.00-89.99 = B+	83.00-86.99 = B	80.00-82.99 = B-
77.00-79.99 = C+	73.00-76.99 = C	70.00-72.99 = C-
68.00-69.99 = D+	65.00-67.99 = D	63.00-64.99 = D-
< 63.00 = F		

To receive an A+ you must have earned a solid 98+, not a rounded 98+ grade.

Grading Percentages:

The course grade will be calculated using the following weights:

MyOMLab Online Quizzes.....	20%
MyOMLab Homework Problems.....	20%
MyOMLab Exams.....	15%
In-class Exams	30%
Team Supply Chain Project	15%
Total.....	100%

WITHDRAWAL:

Friday, March 10 is the last date to withdraw and receive a "W".

COURSE ASSIGNMENTS:

MyOMLab Assignments: Students will be required to complete online assignments consisting of multiple choice quizzes and homework problems sets. These assignments will be based on material from the textbook. These assignments will cover basic material and are intended to test your understanding of the fundamentals of operations management. **The online assignments for any chapter should be completed by the due date indicated on MyOMLab.**

Exams: Multiple Choice Exams will be administered in MyOMLab. In-class Exams will be problem-based. Exams will be comprehensive - covering specific Modules.

Students will have a choice of team projects:

1. Supply Chain Simulation

Students will participate in Teams. The HBR Root Beer Game will be used online to demonstrate the importance of supply chain integration and its impact on performance as well as to demonstrate the advantages of a Demand Driven Supply Chain Management System. WebEx will be used as the tool to provide opportunity for Team interaction. Each student will be expected to provide an individual report summarizing the Learning Experience and Lessons Learned. This is a Team learning experience but students will be graded individually based on their own submission.

For this assignment, we will use a simulation program. The Simulation requires four participants for each Team. Each team will play a minimum of 3 out of 4 rounds.

Supply Chain Management Simulation: Root Beer Game V2

July 15, 2012

Product Number: 6619-HTM-ENG

The Root Beer Game can be purchased from Harvard Business Review. The link to the Course Pack is attached below. In addition, the link and instructions will be posted in the Module for the Team Project on Canvas prior to actual due date. The License to use the Simulation costs \$15.00 and must be purchased to participate.

<http://cb.hbsp.harvard.edu/cbmp/access/57003094>

2. Plant Tour

Students will participate in Teams. A team should be no larger than four team members. For this assignment, the team needs to choose a company and arrange a plant tour. All team members need to participate on the tour. Be prepared with a list of questions to ask while you are there. The questions you ask would be based on what we are covering over the semester and what information you will need to have to do a write up about the company.

This is a Team learning experience but students will be graded individually based on their own submission.

For either project, teams need to be developed and reported to the Professor no later than February 1.

COURSE ASSIGNMENTS (Specifics):

MyOMLab Quizzes: Students are required to complete online quizzes in MyOMLab. Quizzes are based on material from the textbook and are intended to test your understanding of the fundamentals of operations management.

MyOMLab Homework – Students are required to complete online homework assignments in MyOMLab. Homework assignments are usually complex computation problems similar to examples in the text.

MyOMLab Exams - Exams in MyOMLab will be multiple-choice questions similar to the ones used for weekly quizzes. All exams will be given during scheduled time periods on the dates indicated on the syllabus.

You must login and complete the scheduled exams during the scheduled time period. There is only one attempt allowed on Exams and the Results will not be shown after completion in MyOMLab. The Professor will download grades and upload to Canvas after the close of the scheduled Exam period.

In-Class Exams – Exams held during class periods will be problem questions to test your knowledge of the subject matter. They will be similar to but not necessarily the same as those seen on the MyOMLab Homework problems. All exams will be given during scheduled time periods on the dates indicated on the syllabus.

Written Case Analysis: An individual case analyses related to Darden Restaurants will be assigned in lieu of a Homework Assignment for the Module related to Total Quality Management. The grade will be included in the Homework Category. This case study is designed to challenge the student's analytical skills and highlight key learning elements from the text chapter content. Students will work on the written case analysis on an individual basis (not in groups). A Word template will be provided on Canvas for each student to use in the analysis.

Team Supply Chain Project - Students will be required to participate in a web-based simulation or a company tour. See page 7 for more information.

Important Note: As you can see there are many deliverables for this course and all must be completed as scheduled. It is critical that students adhere to the schedule presented. All graded assignments are listed on the Modules tab in Canvas and show on the Home Page when you log into the Course Site. This should be your primary reference for things to complete on specific dates.

GENERAL COURSE ELEMENTS:**Written Communication**

Communications skills are critical to success in the dynamic and diverse global business environment. This course places emphasis on the ability to analyze information and present recommendations in clear, well-written responses.

Technology Applications: Students will be expected, whenever possible, to use appropriate information technology in completing assignments. Discussion of the impact of emerging technology on the Operations function will be a component of this course.

Corporate Social Responsibilities (Sustainability and Ethical Perspectives): Various CSR topics and applications to specific companies and their processes will be covered.

Global Perspectives: Discussion of the impact of global operations and the challenges it poses for managers will be covered in this course.

Demographic Diversity Perspectives: This course will not specifically address this issue.

Political, Social, Legal, Regulatory and Environmental Perspectives: These will be discussed as they apply to location decisions made by Operations Managers and how they pose challenges for Operations Managers.

ACADEMIC INTEGRITY POLICY: You must abide by the UNCG Academic Integrity Policy on all assignments (papers, projects, tests, quizzes etc.) that are part of this course. Failure to abide will result in appropriate consequences as spelt out in the policy. See <http://sa.uncg.edu/handbook/academic-integrity-policy/>

FACULTY / STUDENT GUIDELINES:

The Bryan School has developed a set of guidelines on student behavior and expectations in and out of the classroom as well as what you should expect of me as faculty member. I will encourage you to read through those guidelines by the end of the first week of class. Here is a link to the .pdf file for those guidelines. See:

http://www.uncg.edu/bae/faculty_student_guidelines.pdf

2.0 Bryan School of Business Mission & Links to Course Objectives

The Bryan School of Business and Economics' Mission Statement

In the Bryan School of Business and Economics, we create and disseminate knowledge about the theory and practice of business. In addition to our courses and research, we accomplish this through hands-on projects, global experiences, and outreach to the community. Our work produces principled leaders and exceptional problem solvers who have a global perspective, an innovative mindset, a broad understanding of sustainability, and a commitment to improve the organizations in which they work and the communities in which they live.

Student Learning Goals

Each program within the Bryan school has separate learning goals as listed with the degree program. The essential components of a professional education in business (excluding the B.S. and B.A. in Economics, the B.S. in Consumer, Apparel, and Retail Studies and the B.A. in Sustainable Tourism and Hospitality) include common courses for breadth and opportunities for advanced work for depth in the various business disciplines. These core business programs share the following common learning goals:

1. Students will implement the various steps of the critical thinking process, supported by the appropriate use of analytical and quantitative techniques, to formulate recommendations for subsequent decision-making.
2. Students will apply appropriate ethical standards when making recommendations for business decision-making.
3. Students will evaluate business decisions in the context of sustainability goals, balancing environmental, social, and economic needs, conditions, and potential decision impacts.
4. Students will formulate appropriate strategies, in the context of global issues and forces, to improve business performance in the world economy.
5. Students will explain the roles of innovation and innovation management in achieving successful business strategies, decisions, and performance.
6. Students will be able to plan, schedule, contribute to, and lead projects.

Impact of this Course on the Program Student Learning Goals

Upon successful completion of Operations Management (SCM302), students will have met the Student Learning Goals on sustainability (#3 above). Students will also meet various components of the Critical Decision-Making (#1), Ethical Management (#2), Global and Multicultural (#4), and Collaboration, Communication, and Knowledge-Integration (#6) Goals.

3.0 Course Schedule

*(Note: adjustments may need to be made during Semester. **Chapter References are numbered according to the 11th Edition of the Text. Other versions may number differently so go by Chapter Titles if in doubt).***

Week of January 18:

Intro to Course

Intro to HBR Root Beer Simulation / Plant Tour projects

Module 01: Operations Productivity & Strategy in a Global Environment

Operations Management 11th Ed: Chapter 1 and 2

Week of January 25:

Module 02: Project Management

Operations Management 11th Ed: Chapter 3

Week of February 1:

Module 03: Forecasting

Operations Management 11th Ed: Chapter 4

Signup for Team Supply Chain Projects complete / Round 1 of Simulation opens

Week of February 8:

Module 04: Design of Goods and Services / Sustainability

Operations Management 11th Ed: Chapter 5

Week of February 15:

Exam #1 (Comprehensive: Modules 01 – 04)

Multiple Choice: Online

Problems: In class 6:30 PM to 7:15 PM

Module 05: Managing Quality

Operations Management 11th Ed: Chapters 6/6S

Virtual Simulation Round 1 discussion / Round 2 opens

Week of February 22:

Module 05: Managing Quality

Operations Management 11th Ed: Chapters 6/6S

Module 06: Process Strategy and Capacity Management

Operations Management 11th Ed: Chapter 7

Week of March 1:

Module 07: Location Strategies

Operations Management 11th Ed: Chapter 8

Virtual Simulation Round 2 discussion / Round 3 opens

Week of March 8:

Module 08: Layout Strategies

Operations Management 11th Ed: Chapters 9

Week of March 15:

Spring Break (March 11-19)

Week of March 22:

Module 09: Supply Chain Management
Operations Management 11th Ed: Chapter 11

Week of March 29:

Exam #2 (Comprehensive: Modules 05 – 09)
Multiple Choice: Online
Problems: In class 6:30 PM to 7:15 PM
Virtual Simulation Round 3 discussion / Round 4 opens
Module 10: Inventory Management
Operations Management 11th Ed: Chapter 12

Week of April 5:

Module 10: Inventory Management
Operations Management 11th Ed: Chapter 12

Week of April 12:

Module 11: Aggregate Planning and S&OP
Operations Management 11th Ed: Chapter 13
Virtual Simulation Round 4 discussion / Team Simulation closes / Single Player only open

Week of April 19:

Module 12: Material Requirements Planning (MRP) and ERP
Operations Management 11th Ed: Chapter 14
Final Written Report Due for Team Supply Chain Project

Week of April 26:

Module 13: JIT and Lean Operations
Operations Management 11th Ed: Chapter 16

May 10 - 7 to 8:30 PM

Final Exam:

Exam #3 (Comprehensive: Modules 10 – 13)
Multiple Choice: Online
Problems: In class

4.0 Biographical Sketch of Faculty Member

Hello, everyone! I am Dr. Karen Pentz and I am very happy to be here. I currently reside in Greensboro, NC, where I graduated from the University of North Carolina at Greensboro with an undergraduate degree in Information Systems and Operations Management and a Master's in Business Administration. I received my Doctor of Business Administration from the University of Phoenix.

I currently work for Oracle Packaging in Winston Salem managing Demand Planning and S&OP, and American Public University and UNCG as an Adjunct Professor, teaching supply chain, operations, logistics, and transportation. I also am an active member of APICS, the Association for Operations Management. My teaching career began when I started teaching APICS CPIM certification classes. I have earned the APICS CPIM and CSCP certifications and am currently working towards the APICS CLTD certification. In addition, I hold a Six Sigma Black Belt designation.

I began my professional career in Accounting, working for a number of organizations in Payroll, Accounts Payable, and General Ledger as both an Accountant and Accounting Supervisor. I had a mid-career switch to Operations Management (OM) after taking an introductory OM class as part of my undergraduate degree. Yes, the very same one you are taking now!

I changed my degree and have been in supply chain ever since.

5.0 Course Governance and Expectations

PREAMBLE – OUR COMMITMENT

The administration, faculty, staff, and students of the Bryan School of Business and Economics at UNCG are committed to professional and ethical behavior in all areas of their academic and professional lives. The principles and expectations established in this document and the addendums encompass many aspects of professional behavior and integrity. It is not an exhaustive list, since change is part of life both inside and outside the university.

This set of Guidelines constitutes a statement of values and expectations; concerns and issues are still best addressed by conversations between the individual faculty member and student. If further discussions are necessary, please contact the faculty member's Department Head.

EXPECTATION OF ALL LEARNING COMMUNITY MEMBERS

The first sentence of the UNCG Student Code of Conduct is: "Members of the UNCG community respect fundamental principles for ensuring a campus environment conducive to peaceful and productive living and study. These principles include five values: honesty, trust, fairness, respect, and responsibility." All university members (students, faculty, and staff) have a responsibility to uphold these five values, and this is true in the Bryan classroom environment and related academic activities.

EXPECTATIONS OF STUDENTS

Students in the Bryan School must conform to all existing principles found in UNCG's Academic Integrity Policy and the Student Code of Conduct. Further details may be found at the following sites: "<http://academicintegrity.uncg.edu/complete/>" and "<http://studentconduct.uncg.edu/policy/code/>" The attached addendum lists specific expectations of students regarding the learning process and environment at the Bryan School.

EXPECTATIONS OF FACULTY

Faculty in the Bryan School must conform to all existing UNCG codes and policies, and their teaching roles are of particular relevance to these Guidelines (see "http://provost.uncg.edu/faculty/h_section4.asp" for further details). The attached addendum lists specific expectations of faculty regarding the learning process and environment at the Bryan School.

Footnote 1: This document does not constitute a binding contract between students and the University.

Footnote 2: Portions of these Guidelines were modeled after the Professional Standards developed by the College of Business at Illinois State University. We thank them for their contributions!

6.0 Summary of Module steps to be successful in SCM302 On-Line

As mentioned above, this course is offered On-Line, but is delivered in a blended approach to provide some interpersonal interaction between the Professor(s) and Student(s). The following Table outlines the various activities that are established / provided to enhance student learning experiences and their overall probability of success.

Please try to follow these steps initially. Students will find other approaches to accommodate their learning styles, but try to follow this process early in the semester and modify as you go through our SCM302 course!

Step	Task	Timing
1	Skim Chapter(s) assigned for each Module (Text or WordPress site)	Weekly
2	Attend class	Weekly
3	View the Camtasia recordings if available. Camtasia videos focus on problem solving for homework assignments.	Recommended by Friday 11:59 pm
4	Read Chapter(s), review detailed PowerPoint and lectures for Module found on WordPress site. Begin working on Practice homework where available. <i>Note: Practice homework and practice exams do not count towards grades on Canvas but are highly recommended.</i>	Recommended by Friday 11:59 pm
5	Required: Complete online quiz and homework for Module (graded assignments). Also complete any special assignments / tasks in Canvas.	Open Monday 12:00 AM Close Sunday 11:59 PM
6	Repeat this process for each Module.	Weekly