SCM-302 Spring 2018, Section 05 / 05D

OPERATIONS MANAGEMENT
Syllabus

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1.0 General Information

START DATE:
January 8, 2018

PLACE AND TIME:
This is an on-line blended learning course. There are no regularly scheduled face-to-face class sessions. However, some face-to-face optional sessions may be offered for special purposes.

The blended learning approach incorporates standard e-learning with added WebEx Virtual Meeting sessions on a regular weekly schedule. WebEx sessions will be held in the evening of one day per week and will be recorded. This will provide access for students unable to participate in live sessions.

WebEx sessions will be used to present / clarify course concepts and allow opportunity for sharing and dialogue between the Professor and Participants. Participation, either in-person or through recordings, is strongly encouraged.

The professor can be contacted by e-mail and will be available for phone or WebEx meetings as required. These will be set up by e-mail at mutually convenient times.

FACULTY MEMBER:
Dr. Karen Pentz
E-Mail: kcpentz@uncg.edu
Cell: 336-430-5249
Department of Information Systems and Supply Chain Management
Office: Bryan 435 - Office hours or virtual office hours by appointment only

REQUIRED COURSE MATERIALS:
The following text and online 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. Three are offered by the UNCG Bookstore. You only need to select one of these. We try to offer some flexibility with Text Selection to meet financial needs. All three of the options are fine – just purchase one of them.
• The most expensive is the Pearson hardback text. It is great as a reference as it includes other chapters beyond what we will cover. The Bookstore has a buy back option for this book.

• The SCM-302 Bundle is a paperback customized text, including only the chapters we will cover. The Bookstore will not buy these back.

• The e-text has full access to all chapters included in the hardback edition. With this option, you can later acquire a loose-leaf version of the text if you want.

• All three packages include access to MyOMLab. This is Mission Critical. If you were to decide to purchase a used text or rent it from another vendor, then MyOMLab access will need to be purchased as well through Pearson.

• Of course, you can also purchase the text and MyOMLab together directly from Pearson.

• You may access the e-text and the MyOMLab on a trial basis for 17 days to determine if the e-version will work for you. However, if you do not purchase access before the trial period expires you will not have access and this will be a major problem!

• Instructions for purchase / registration for MyOMLab will be posted on the Canvas site for the Class. You will be provided a Course ID that must be used in that process.

• When you register for MyOMLab, use this Course ID: pentz41262

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 2018 Spring - SCM302 Section 05/05D - Operations Management:
2. Under Register, select Student.
3. Confirm you have the information needed, then select OK! Register now.
4. Enter your instructor’s course ID: pentz41262, and Continue.
5. Enter your existing Pearson account username and password to Sign In. You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics. If you don’t have an account, select Create and complete the required fields.
6. Select an access option.
   Enter the access code that came with your textbook or was purchased separately from the bookstore.
   Buy access using a credit card or PayPal account.
   If available, get temporary access by selecting the link near the bottom of the page.
7. From the You’re Done! page, select Go To My Courses.
8. On the My Courses page, select the course name 2018 Spring - SCM302 Section 05/05D - Operations Management to start your work.

To sign in later:
2. Select Sign In.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select the course name **2018 Spring - SCM302 Section 05/05D - Operations Management** to start your work.

**To upgrade temporary access to full access:**
1. Go to [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com).
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select **Upgrade access** for **2018 Spring - SCM302 Section 05/05D - Operations Management**.
   1. Enter an access code or buy access with a credit card or PayPal account.
For a registration overview, go to [www.pearsonmylabandmastering.com/students/get-registered](http://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. 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 several 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 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.
• WebEx 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: This is a virtual learning experience with the addition of optional WebEx sessions to assist students in the learning process. WebEx Sessions will be recorded for those unable to attend.

PERFORMANCE EVALUATION AND GRADING:
The following criteria will apply to the grading of assignments:

Grading Scale (%)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>98.00+</td>
</tr>
<tr>
<td>A</td>
<td>93.00-97.99</td>
</tr>
<tr>
<td>A-</td>
<td>90.00-92.99</td>
</tr>
<tr>
<td>B+</td>
<td>87.00-89.99</td>
</tr>
<tr>
<td>B</td>
<td>83.00-86.99</td>
</tr>
<tr>
<td>B-</td>
<td>80.00-82.99</td>
</tr>
<tr>
<td>C+</td>
<td>77.00-79.99</td>
</tr>
<tr>
<td>C</td>
<td>73.00-76.99</td>
</tr>
<tr>
<td>C-</td>
<td>70.00-72.99</td>
</tr>
<tr>
<td>D+</td>
<td>68.00-69.99</td>
</tr>
<tr>
<td>D</td>
<td>65.00-67.99</td>
</tr>
<tr>
<td>D-</td>
<td>63.00-64.99</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 63.00</td>
</tr>
</tbody>
</table>

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 ............................ 45%
- Team Supply Chain Project .............. 15%
- Total ........................................ 100%

WITHDRAWAL:
Friday, March 2 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 problem sets. These assignments will be based on material from the textbook and will cover basic material. These assignments 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.

**MyOMLab Exams**: Exams will be a combination of multiple-choice question and computational problems similar to the ones used for weekly quizzes and homework assignments. 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.

**Written Case Analysis**: An individual case analysis related to Darden Restaurants is 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.

**Company Tour**: This assignment will be a team project. Each team (4-6 members) will complete a physical or virtual tour of a company and write a report summarizing key findings. Teams need to be developed and submitted in Canvas no later than January 26. To submit a team, go to the People tab in Canvas, click on Project Groups, then +Group, and create the team. Each team can have no more than six (6) members.

**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 8:
Intro to Course
Module 01: Operations Productivity & Strategy in a Global Environment
Operations Management 11th Ed: Chapter 1 and 2
WebEx session Monday 6:30 – 7:30 pm Eastern

Week of January 15:
Module 02: Supply Chain Management
Operations Management 12th Ed: Chapter 11

Week of January 22:
Module 03: Project Management
Operations Management 11th Ed: Chapter 3
WebEx session Monday 6:30 – 7:30 pm Eastern
Signup for Team Supply Chain Project complete

Week of January 29:
Module 04: Design of Goods and Services / Sustainability
Operations Management 11th Ed: Chapter 5
WebEx session Monday 6:30 – 7:30 pm Eastern
Exam #1 (Comprehensive: Modules 01 – 04)

Week of February 5:
Module 05: Managing Quality
Operations Management 11th Ed: Chapters 6/6S
WebEx session Monday 6:30 – 7:30 pm Eastern
Interim Report #1 Due for Team Supply Chain Project

Week of February 12:
Module 06: Process Strategy and Capacity Management
Operations Management 11th Ed: Chapter 7/7S
WebEx session Monday 6:30 – 7:30 pm Eastern

Week of February 19:
Module 07: Location Strategies
Operations Management 11th Ed: Chapters 8
WebEx session Monday 6:30 – 7:30 pm Eastern

Week of February 26:
Module 08: Layout Strategies
Operations Management 11th Ed: Chapters 9
WebEx session Monday 6:30 – 7:30 pm Eastern

Week of March 59:
Spring Break (March 5-11)
No assignments or Webex this week

**Week of March 12:**
Module 13: JIT and Lean Operations  
Operations Management 11th Ed: Chapter 16  
WebEx session Monday 6:30 – 7:30 pm Eastern  
Interim Report #2 Due for Team Supply Chain Project

**Week of March 19:**
Webex Review session Monday 6:30 – 7:30 pm Eastern  
Exam #2 (Comprehensive: Modules 05 – 09)

**Week of March 26:**
Module 10: Forecasting  
Operations Management 11th Ed: Chapter 4  
WebEx session Monday 6:30 – 7:30 pm Eastern

**Week of April 2:**
Module 11: Inventory Management  
Operations Management 11th Ed: Chapter 12  
WebEx session Monday 6:30 – 7:30 pm Eastern

**Week of April 9:**
Module 12: Aggregate Planning and S&OP  
Operations Management 11th Ed: Chapter 13  
WebEx session Monday 6:30 – 7:30 pm Eastern  
Final Written Report Due for Team Supply Chain Project

**Week of April 16:**
Module 13: Material Requirements Planning (MRP) and ERP  
Operations Management 11th Ed: Chapter 14  
WebEx session Monday 6:30 – 7:30 pm Eastern

**Week of April 23:**
Webex Review session Monday 6:30 – 7:30 pm Eastern

**Final Exam:**
Exam #3 (Comprehensive: Modules 10 – 13)
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 Winston Salem, NC. 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 at 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, CSCP, and CLTD certifications. 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

As mentioned above, this course is delivered in a blended approach to provide interaction between the Professor(s) and Student(s). The following Table outlines the various activities 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!

The Schedule of all required assignments is included on the Course Calendar and is visible on Canvas from the Home page. You should check this listing each week to identify what needs to be completed.

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Skim Chapter(s) assigned for each Module (Text or WordPress site)</td>
<td>Weekly prior to WebEx session</td>
</tr>
<tr>
<td>2</td>
<td>Attend WebEx session</td>
<td>Monday 6:30 – 7:30 pm</td>
</tr>
<tr>
<td>3</td>
<td>View the Camtasia recordings if available. Camtasia videos focus on problem solving for homework assignments.</td>
<td>Recommended by Friday 11:59 pm</td>
</tr>
<tr>
<td>4</td>
<td>Read Chapter(s) and review detailed PowerPoint and lectures for Module found on WordPress site. Begin working on Practice homework where available. Note: Practice homework and practice exams do not count towards grades on Canvas but are highly recommended.</td>
<td>Recommended by Friday 11:59 pm</td>
</tr>
<tr>
<td>5</td>
<td><strong>Required:</strong> Complete online quiz and homework for Module (graded assignments). Also, complete any special assignments / tasks in Canvas.</td>
<td>Open Monday 12:00 AM Close Sunday 11:59 PM</td>
</tr>
<tr>
<td>6</td>
<td>Repeat this process for each Module.</td>
<td>Weekly</td>
</tr>
<tr>
<td>7</td>
<td>Exams are administered with strict availability times. Grades and question results are not open on MyOMLab. Grades are transferred to Canvas after the close of each exam.</td>
<td>Open Friday 12 am Close Sunday 11:59 pm</td>
</tr>
</tbody>
</table>