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

SCM 302-02: Operations Management (Spring 2020)

**Instructor:** Onyi Nwafor  
**Phone:** (336) 256-8887  
**E-Mail:** o_nwafor@uncg.edu  
**Class Time:** Designated Thursdays, 2:00 pm – 3.00 pm (WebEx Sessions)  
**Office Hours:** Virtual Office Hours by appointment.

**COURSE DESCRIPTION**

Operations management involves the administration of an organization’s resources in such a way as to create products and services efficiently and effectively. Resources include materials, equipment, capital, and labor; products are tangible objects that have to be manufactured (e.g., computer widgets); and services are work activities that are performed to deliver value to customers (e.g., healthcare). Thus, operations management spans an almost unlimited spectrum of organized efforts -- from the manufacture of printed electronic circuit boards to the delivery of social services by a local government; from the fast-food business to the health services industry.

Managing resources to generate goods and services in an efficient and effective way is challenging for many organizations. This course introduces students to the concepts, issues, and techniques used to design, analyze, and manage an organization’s operational activities effectively and efficiently. It also provides a foundation for more in-depth study within the Operations Management/Supply Chain Management curriculum. Specific topics that are covered in this course include formulation and design of operations strategy, project management, quality management, forecasting, inventory control, supply chain management, Just-in-Time and Lean operations, and capacity management--- to mention a few.

**PRE-REQUISITE COURSES AND REQUIREMENTS**

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

**COURSE OBJECTIVES**

At the conclusion of this course students are expected to:

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

**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.

COURSE TEXTBOOK AND OTHER MATERIALS
The required textbook is “Operations Management- Sustainability and Supply Chain Management”, (12th Edition) by Heizer et al. Students 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. Other details to keep in mind are:

• The SCM-302 Bundle is a Paper Bound Customized Text. It only includes the chapters that will cover be covered in the course. The Bookstore will **not** buy these back
• The most expensive option is the Pearson hard bound text. It is great as a reference as it includes other interesting chapters beyond that go beyond the scope of this class.
• The e-text has full access to all chapters included in the Hard-Bound Edition. With this option, students can later acquire a loose-leaf version of the text.
• All three packages include access to MyOMLab.
• Students that already have the text or decide to purchase/rent a used text from other sources will need to purchase access to MyOMLab through Pearson.
• Students can also purchase the text and MyOMLab together directly from Pearson.
• Please note that students can access the e-text and MyOMLab on a trial basis for 14 days. This may be a good option for students waiting on financial aid

**Important:**

• **All students registered for this course are required to have access to MyOMLab as quizzes, homework problems, and exams will be delivered via this portal.**
• **It is important to access MyOMLab within two days of the semester since the first quiz will be due by the first week of classes!**
• **When you register for MyOMLab 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). This will enable synchronization of your grades with Canvas.**
COURSE STRUCTURE
This course will be taught 100% online. It combines standard e-learning with added WebEx sessions on designated dates (please see the course schedule at the end of this document for more details).

This course uses an inverted classroom model, wherein students are responsible for reviewing the course materials posted online BEFORE participating in the instructor-led WebEx sessions. This approach allows time to address more challenging problems and in-depth discussions of the subject matter during the WebEx sessions. The course includes many assigned readings and other supplementary material from the course text/MyOMLab. To be successful in this course, students should be prepared to spend a fair amount of time outside of class reading both the course text and working on designated assignments.

Canvas
This course will use UNCG Canvas as a course management tool to post important information. This information includes course syllabus, tests, grades, videos, reading articles, announcements, and such other instructional materials. To access Canvas, visit: http://canvas.uncg.edu. Students must have an active UNCG email account to access Canvas. Canvas works best using the Mozilla Firefox browser or Google Chrome. It is the student’s responsibility to check Canvas regularly for important announcements, such as class notes, emails, grades, etc.

Ask your Instructor Discussion Board
I have created a discussion board, “Ask Your Instructor” on Canvas. Please use this discussion board to ask any general questions you may have about the class, so I can respond to them in public. Chances are that if you have a question, someone else has the same one!

WebEx
The learning approach combines standard e-learning with WebEx module review sessions. WebEx sessions will be held on selected weeks (see course schedule for more details). Students can access the weekly WebEx sessions via the link provided within the associated course modules on Canvas. Note that the links to the WebEx sessions will not be available until 15 minutes before the scheduled start time. On the weeks that they hold, the WebEx sessions will take place from 2:00 – 3:00 p.m. on Thursdays. WebEx meetings will serve as module review sessions used to clarify key concepts assigned for the week, and to allow opportunity for knowledge sharing and dialogue between the instructor and students. These sessions will only add to the assigned course materials, and not replace them. Students must read the assigned course materials before the WebEx sessions! Every WebEx session is important. Students should endeavor to participate in all. The sessions will be recorded to allow access to students unable to participate in “live” sessions. Students can access the recordings via the WebEx link in Canvas. The video recordings will not be available until the day following each session.

MyOMLab Quizzes
There will be a quiz at the end of each module to test students’ understanding of the module, and to provide an opportunity to practice recognizing key OM principles and concepts. Students are required to complete online quizzes in MyOMLab. Unless otherwise stated, quizzes will open at 3 p.m. on Thursdays and will be due at 11:59 p.m. on the Wednesday following the quiz assignment. Please note that the instructor does not grant extensions nor provide opportunity for makeup quizzes. Students will earn a score of zero for each quiz assignment that they fail to submit by the due date.

In the event that a technical problem prevents a student from submitting a quiz assignment by the due date,
the instructor may grant the student an opportunity to complete the assignment, **strictly on the condition that the student provides evidence of the technical problem** (e.g., a screenshot of the error message clearly showing the date and time the error occurred). It is the student’s responsibility to ensure that he/she captures evidence of the technical error (including **date and time**) at the time that it occurs. Students are therefore advised to ensure that they have a reliable computer and internet access ready before attempting each quiz.

**MyOMLab Homework Problems**
Students will be required to complete homework problems at the completion of certain modules. Homework problems typically include complex computation problems. Students are therefore encouraged to collaborate with other students (if they wish) and/or ask questions about the homework if any exist. Details will be provided in Canvas, and due dates will be also posted on MyOMLab. Students are required to complete online homework assignments in MyOMLab. As is the case with the quizzes, the instructor does not grant extensions nor provide opportunity for makeup assignments. **Students will earn a score of zero for each homework assignment that they fail to turn in by the due date.** Please see the section on “**MyOMLab Quizzes**” above, for information on the only conditions under which the instructor may consider accepting late submissions.

**Exams**
The course includes three exams. Each exam will be a combination of multiple-choice questions and computational problems similar to the ones used for weekly quizzes and homework assignments. All exams will be given during scheduled time indicated on the syllabus. Students must login to MyOMLab to complete the scheduled exams at any time within the 24-hour window shown on the course schedule. However, once started, exams must be completed in a single sitting. Please see the “Make-Up Exam Policy” below for the policy on make-up exams.

**Experiential Assignments**
The course also includes experiential assignments. The assignments could take the form of simulations, a virtual company tour, or any other activity that provides insight into the operational activities of a business organization. The experiential assignment(s) provide an opportunity to demonstrate how the concepts covered in class apply in industry. For example, a virtual company tour experiential assignment may require students to complete a physical tour (or online research) of an actual company and write a report summarizing key findings. The experiential assignment(s) can take the form of individual or team-based projects. The instructor will provide specific details of the experiential assignment(s) over the course of the semester.

**Grades**
The point allocation and resulting letter grades for the course are detailed below:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage of Overall Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (3 exams, 15% each)</td>
<td>45%</td>
</tr>
<tr>
<td>MyOMLab Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>MyOMLab Homework Problems</td>
<td>20%</td>
</tr>
<tr>
<td>Experiential Assignment(s)</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
The required performance for each letter grade is given below. Note, that final grades averages are not rounded off to the next higher integer. For example, a 92.99 is an A-, not an A.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100 %</td>
</tr>
<tr>
<td>A-</td>
<td>90-92.99 %</td>
</tr>
<tr>
<td>B+</td>
<td>87-89.99 %</td>
</tr>
<tr>
<td>B</td>
<td>83-86.99 %</td>
</tr>
<tr>
<td>B-</td>
<td>80-82.99 %</td>
</tr>
<tr>
<td>C+</td>
<td>77-79.99 %</td>
</tr>
<tr>
<td>C</td>
<td>73-76.99 %</td>
</tr>
<tr>
<td>C-</td>
<td>70-72.99 %</td>
</tr>
<tr>
<td>D+</td>
<td>68-69.99%</td>
</tr>
<tr>
<td>D</td>
<td>66-67.99%</td>
</tr>
<tr>
<td>D-</td>
<td>64-65.99%</td>
</tr>
<tr>
<td>F</td>
<td>Below 64 %</td>
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</tbody>
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GENERAL
Office Hours
The instructor’s virtual office hours are set up to assist with students’ understanding of the material. Students are STRONGLY encouraged to contact the instructor at the first sign of any problem or lack of understanding. Do not wait until it is too late! Students are encouraged to post questions on the “Ask your Instructor” discussion board. The instructor will respond to all questions posted on this forum within 24 hours. To avoid repeat questions, students are encouraged to review the discussion thread before posting questions.

Make-Up Exam Policy
Exams may not be missed for the convenience of the student. The exam dates are published in the course schedule and it is expected that students will schedule their other activities around these exam dates. If a major exam is to be missed due to approved university reasons, students must inform the Professor before the exam (if not possible, no later than 24 hours after the exam) and must furnish the Professor with the original documentation (copies will not be accepted) why the absence should be excused. There will be no make-ups for missed exams without a university approved excuse. If excuse is approved, students are allowed to take the exam on the date agreed by the instructor and the student. The make-up exam will cover the material of the missed exam and the new material that is covered prior to the make-up exam date. The format of the exam may be different from the exam given to the rest of the class. An exam, whether regularly scheduled or make-up, that is missed without an approved excuse will be assigned a grade of ZERO.

STUDENT RESPONSIBILITIES:
The student is expected to actively participate in all electronic discussions and complete all assignments on schedule. Failure to participate will result in a lowering of a student’s average.

Bryan School Faculty and Student Guidelines
http://www.uncg.edu/bae/faculty_student_guidelines.pdf
BRYAN SCHOOL POLICIES

The UNCG Honor Policy: All students are expected to comply with the UNCG Honor Policy, described at the following page: http://academicintegrity.uncg.edu/complete.

The Faculty & Student Guidelines: Bryan Faculty and students in this course are expected to adhere to the guidelines stated at this link: https://bryan.uncg.edu/wp-content/2017/08/Faculty-and-Student-Guidelines-2018-2019.pdf

Bryan School of Business Mission & Links to Course Objectives

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 and the B.S. in Consumer, Apparel, and Retail Studies) 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.

SCM 302 supports student learning in five different Student Learning Goals areas.

- Critical Decision-Making (#1) - The course provides instructions and assessments for six major analytical and managerial problems. Students are required to analyze data, make a presentation of the important factors and numerical results, and provide a recommendation for management.
- Ethical Management (#2) – The course discusses ethical management practices and actions in several different chapters within the text, and students analyze the ethical practices within their report on their virtual company.
- Sustainability (#3) - The course devotes one chapter and one week’s of time to various Sustainability issues. We introduce the 3R’s and discuss how companies are improving CSR in different manners. Quiz used for assessment.
- Global issues (#4) with a focus on operational planning/organizing/controlling in global/multicultural environments - The course and instructors consistently use international and foreign company examples as part of our continuous improvement and supply chain management chapters.
- Communication and Team-Based Projects with a focus on managing and controlling projects (#6) - The course requires teams of students to plan and manage a semester-long project focused on different operational or transportation or logistics firms. The teams analyze the present competitive and operational status of the firm, and make recommendations for improvement. They may use some of the specific project management tools and techniques taught earlier in the course, as appropriate for their specific firm and planning needs.