DSCI 304.03 Production and Operations Management

Classroom Tate 315 – TR 10:50 a.m. to 12:05 pm

**Professor:** Luis A. J. Borges, Ph.D.
**Office:** BCTR (Beatty Center) 314

**Office Hours:** TR - 12:05 to 3:05 pm, & W 1:20 to 5:20 pm

**Office Phone:** (843) 953-6770 **E-mail:** borgesla@cofc.edu

**Office Hours:** TR - 12:05 to 3:05pm, & W 1:20 to 5:20 pm

**E-mail:** borgesla@cofc.edu **WebCT:** link at www.cofc.edu

**Note: Occasionally I will have meetings or other University activities during scheduled office hours. So that we can get together in a timely manner, I strongly encourage you to make an appointment to see me.**

**Course Description:**

Operations management is the part of business that actually delivers something – a product, a service, or some combination. Marketing sells, Finance plans a profit, but Operations delivers. These three functions work together. They are often called the "line functions" of a business. Importantly, the effectiveness of Operations in creating and delivering the products or services is increasingly dominating the success of firms today--even determining survival.

Today's environment is one of fierce world-wide, world-class competition. Consequently, the customer does not care how the product is provided – internal processes or extended supply chains – the customer is indifferent as to the source. But the customer is not indifferent to high quality, low cost, and quick, reliable delivery. All are basic requirements. Every manager in every business function today must fully understand this and how the Operations function integrates with the other functions to deliver what customers value. That is what this course is about.

This course will specifically address the planning and control of production and service operations with emphasis on demand forecasting, design of production systems, aggregate planning, inventory management, and quality assurance.

Additional topics will include just-in-time production, cellular manufacturing, flexible manufacturing systems, robotics, computer aided design, and quality circles.

**Prerequisites**

MATH 105 or MATH 231; MATH 104 or MATH 216; DSCI 232; MGMT 301

**Learning Objectives:**

At the completion of this course, the student should understand the following:

Students will become aware of the ethical and social issues associated with operations management: Project Management, Product and Service Design, Work and Job Design, Outsourcing, Location Planning and Selection, and need for management reporting accuracy.

Students will learn about the global environment as it relates to: Competitiveness, Outsourcing, Location Planning and Selection, and International Supply Chain Management.

Students will be learn management science decision tools: Project Management, Productivity Measures, Product and Service Design, Capacity Planning, Linear Programming, Statistical Process Control and Acceptance Sampling, Inventory Management, JIT and Lean Systems, Aggregate and Material Requirements Planning.

Students will learn how to effectively communicate results of their analysis in everyday language.
Text and Course Materials:


Grading and Evaluation:

<table>
<thead>
<tr>
<th>EVALUATION</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>20%</td>
</tr>
<tr>
<td>Cumulative Final Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Assignments</td>
<td>15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LETTER GRADE</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 94</td>
<td>A</td>
<td>73-75.99</td>
</tr>
<tr>
<td>90-93.99</td>
<td>A-</td>
<td>70-72.99</td>
</tr>
<tr>
<td>86-89.99</td>
<td>B+</td>
<td>66-69.99</td>
</tr>
<tr>
<td>83-85.99</td>
<td>B</td>
<td>63-65.99</td>
</tr>
<tr>
<td>80-82.99</td>
<td>B-</td>
<td>60-62.99</td>
</tr>
<tr>
<td>76-79.99</td>
<td>C+</td>
<td>&lt; 60</td>
</tr>
</tbody>
</table>

Attendance Policies (non-negotiable policy)

Students are allowed to miss only ONE WEEK of class without penalty (two sessions for our TR schedule). If you miss one week, the next missed session will turn your grade one letter grade down and the next one, another letter grade down, and so on and so forth. This is a NON-NEGOTIABLE policy. You don’t have to come to me to excuse your absence, and every absence counts for this rule.

Attendance will be taken randomly in different time periods of the class. If you are absent at the time of attendance signing, it will be considered an absence. If you come in late and the attendance has already been passed, it will be considered an absence.

If you miss a session and a homework was submitted, you cannot submit it late or delete the 0 grade of that quiz/homework, no exceptions to this rule.

Missing Exams

No makeup exams will be given.

Homework and Submission Policies

Assignment submissions are to be turned in at the beginning of class on the scheduled due date. NO COPIES WILL BE ACCEPTED. When you use EXCEL your name, class, and the homework number must be in the file in the first sheet. Handwritten must be LEGIBLE. You have to show the work step-by-step. Simple answers are NOT ACCEPTED.

Late assignments will be immediately penalized 20%, and will incur an additional 10% penalty for each calendar day the submission is late.

Please be advised that technology is not perfect. System downtime, computer crashes, slow networks, computer viruses, etc. are facts of life; it is each student’s responsibility to take the necessary precautions and safeguards so as not to fall victim to these potential problems. Technology-related issues and problems will not be accepted as reasonable causes for late assignments. Therefore, students are advised to protect their work and their computers.

Luis A. J. Borges, Ph.D.
Save your files often, make backups, and check your computer frequently for viruses. Get in the habit of practicing “safe computing” and following good computing practices.

**SNAP Students/Special Accommodations/Athletes**

Students needing special accommodations should see the professor within the first week of class. No additional time will be given for the theory part of the micro-exams, only on the practice part (Problems).

**College of Charleston Honor Code**

Students can find the complete Honor Code and all related processes in the Student Handbook at [http://www.cofc.edu/studentaffairs/general_info/studenthandbook.html](http://www.cofc.edu/studentaffairs/general_info/studenthandbook.html).

**Miscellaneous Policies:**

During exams, students are **not allowed to go to the bathroom, unless in extreme cases**. Students should leave their cell phones on the table next to the classroom’s door and don’t take them with them to their seats. The same applies to any other electronic device such as ipods.

While I will try to maintain the class schedule and objectives, I may need to make adjustments.

I do not give additional projects to increase one’s grade before or after the exam(s). The professor rounds grades according to Excel; a 59.4 total grade is an F.

**Complaints about Exams**

- The professor encourages students to review in detail when exam is returned. You have two days after the evaluation is given to you to make any questions or complaints about it. After that time, it means you have accepted the grade given.

  **No complaints are accepted for any reason if the two days period has passed (non-negotiable).**

**Tips for Success:**

This course requires study. Read the assigned material **before** the topic is introduced. I will assume you have done so in my lectures. Quizzes and homework will cover this material. It makes a big difference in class discussion and usually in personal learning as well. Every student is expected to be able to discuss assigned material at any class.

Above all, do keep up. This material is **not** easily digested the night before the exam. The material is new to most students, covers a wide range of activities, and cannot be learned by simply listening. Come to class prepared in order to improve your grade, and more importantly, to improve your understanding of integrated business management.