

**DOMINICAN UNIVERSITY
ROSARY COLLEGE OF ARTS AND SCIENCE
BAD 380-01 – OPERATIONS MANAGEMENT
SPRING 2017 SYLLABUS**

Instructor:	Jeff Bell
Office Hours:	By appointment
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COURSE DESCRIPTION

Catalog: BAD 380 analyzes the role of operations management in manufacturing and service organizations. Topics include production planning, master scheduling, inventory control, material requirements planning, personnel planning, quality control, and just-in-time systems.

Instructor: The course will focus on the concepts and methods necessary to direct and control the "transformation process" of resources into goods and services - within an integrated framework/model of the firm. While the course will be primarily text-based, selected business cases and in-class exercises will be utilized to connect the ideas and techniques to their real-world application.

EXPECTED LEARNING OUTCOMES

Upon successful completion of this course, students should be able to:

- Explain the strategic importance of operations management, the elements of operations strategy, and the basic principles of operations management;
- Explain the Factory Physics® Framework and the portfolio of strategic buffers (time, inventory, capacity) available to execute operations strategy;
- Apply demand management methodologies - including forecasting principles and capacity planning - to develop business, sales, and production plans;
- Develop master schedules/plans to effectively and efficiently utilize the firm's resources in support of customers' requirements;
- Explain the role of inventory within the firm and how to maximize its utility;
- Discuss the capabilities and limitations of alternative methods of operations planning and control - including material requirements planning (MRP), just-in-time (JIT), and theory of constraints (TOC) - and, thereby, make an informed choice of the method appropriate for a particular firm;
- Define the advantages and critical success factors of alternative operations process flows - including job/project, batch, repetitive, and continuous;

- Apply the principles and techniques of total quality management - including quality tools, employee involvement, supplier partnerships, and total preventative maintenance - to assist in meeting customers' requirements;
- Implement operations productivity improvement techniques in order to enhance operational effectiveness;
- Utilize location selection and facility layout to support strategic and operational objectives; and
- Apply operations management concepts and tools within a service environment.

PREREQUISITES

BAD/ECON-260.

MEETING TIME AND DAYS

Tuesday and Thursdays

Sec. 1: 1-215 PM

Sec. 2: 330-445 PM

REQUIRED TEXTS

Practical Operations Management by Natalie Simpson and Philip Hancock: Hercher Publishing Incorporated, 2013. (ISBN: 978-1-939297-00-6)

ASSESSMENT OF STUDENT LEARNING

Grading:

The table below shows the weights of the various course components:

- Quizzes (3 @ 20% each) = 60%
- Case Analyses (3@ 10% each) = 30%
- Homework, In-class Exercises and Participation = 10%

Assignments will be specified in class.

Course Calendar:

Classes are listed by number as opposed to date because, while the material will be covered in roughly this order, the professional schedules of the guest speakers and Mr. Bell may require some adjustments to the routine schedule. The calendar is subject to change. Upcoming class schedules and due dates for assignments will be reviewed at the end of each class. The material will be reviewed in the following order:

Class #	Topics
1	Class Overview, Manufacturing Matters
2	Factory Physics® Framework
3	Operations Strategy Case 1
4	Operations Strategy Case 1
5	Forecasting
6	Forecasting/Quality
7	Quality
8	Quiz 1 Review

9	Quiz 1
10	Design of Goods and Services
11	Capacity Planning
12	Capacity Planning
13	Inventory Planning
14	Inventory Planning
15	Case Study 2
16	Quiz 2 Review
17	Quiz 2
18	Basic Factory Dynamics
19	Aggregate Planning, Materials Requirements Planning, and Supply Chain Management
20	Aggregate Planning, Materials Requirements Planning, and Supply Chain Management
21	Sustainability and Factory Physics Revisited
22	Leadership
23	Communications in Operations
24	Case 3
25	Quiz 3 Review
26	Quiz 3