School of Business Administration

Syllabus for the course
MGT 3303 (01) and (03) Operations Management

Fall 2012

Instructor
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Office hours: Tuesday and Thursday from 9:00 – 12:00 pm

Lectures
For Section 1 on Tuesday and Thursday from 12:30 – 1:50 pm in building 4, room 104
For Section 3 on Tuesday and Thursday from 3:30 – 4:50 pm in building 11, room 008

Prerequisites
- MGT 3301 Principles of Management
- GBU 3401 Advanced Quantitative Methods (or equivalent).

Course description
Producing/delivering qualitatively good products or services is the ultimate goal of most, if not all organizations. Generally, this involves dealing with a complex chain of value that includes the transformation of inputs (raw materials, human resources, capital, etc.) into (hopefully more valuable) outputs that are finished products and services. Operations management focuses on the systematic study of the design, planning, and operations of such value chains. It spans all the value-adding activities of a production/service organization, such as decision analysis, process analysis, project management, supply chain management, transportation, inventory management, and aggregate planning, etc.

This introductory operation management course will cover these topics and will demonstrate how a successful implementation of the methods and techniques featured will help the organization achieve a sustainable competitive advantage. The course will additionally introduce supporting quantitative techniques such as linear programming and decision making techniques that are essential to many of the chapters covered in the course.

Course Material
This course has the following required textbook: Operations Management, 7th edition, Russell and Taylor, Wiley, 2011. In addition to the required textbook, other teaching material (readings, papers, book chapters, etc.) will be made available to the students during the semester, following the course progress.

Course Objectives
Upon completion of the course, the student will be able to:

1. Understand and describe operations in terms of inputs, processes, flows, outputs, suppliers and customers, and give examples of how operations can be used as a competitive weapon by the organization.
2. Explain the role of operations strategy as a pattern of decisions oriented towards the achievement of competitive priorities.
3. Use decision analysis techniques (payoff tables, sequential decision trees) to make optimal decisions.
4. Analyze processes in terms of efficiency, the presence of bottlenecks, etc, using supporting tools such as flow diagrams and process charts.
5. Formulate and solve a linear programming model for an optimization problem.
6. Manage project processes by diagramming the network of interrelated activities in a project, identifying the sequence of critical activities, evaluating the probability of completing projects on time, and crashing activities in a project.
7. Understand the bullwhip effect and understands how this effect can be substantially decreased.
8. Describe the components of a supply chain and its important performance measures.
9. Explain the role of inventory in supply chains; distinguish between continuous and periodic inventory systems; use the ABC classification system; compute measures associated with the Economic Order Quantity (EOQ) Model and its variants.
10. Describe aggregate plans and their role in the supply chain; Use linear programming as quantitative technique for solving aggregate planning problems.

Teaching Method
This course is taught through a series of lectures, in-class discussions and exercises, cases, and two exams. The students will also work on a term project in which they have to apply some of the course concepts to a real-life situation.

Students should come prepared to the class by reading in advance the sections of the textbook that will be covered in the session as well as any other material handed by the instructor. Students are also expected to contribute to the in-class discussions. Dialogue is not only strongly encouraged, it is critical to your understanding of the material. Please feel free to ask questions in case you don't understand something. These questions also provide the professor important feedback on the areas in which we need to spend more time.

Regular attendance is essential. Students who miss a class are responsible of all the work, notes, handouts, and assignments they miss. Please refer to the attendance policy section below. In order to not disturb the lecture, students should come on time and avoid leaving the class early. Arriving late to the class two times will account as one unexcused absence.

The students will also realize a term project, which will be devoted to the study of the supply chain and logistical operations of a Moroccan company of their choice. The project is meant to put into practice some of the topics studied in this course and will require a significant analysis effort. Being a team-oriented task, the project should be realized by teams of four to five students.

The deliverables of the project are:

1. A report presenting the background of the company, describing in detail its current supply chain, identifying quantitatively and qualitatively strengths and weaknesses of the chain and the logistics operations of the company, identifying, and justifying valid alternatives, and making final recommendations.
2. A presentation by the team during the last weeks of class.

Grading

The final grade for this course will be based on the following weights: Midterm exam (30%), Final Exam (35%), Term paper (25%), Participation and attendance (10%).

Letter grades are awarded on the basis of the following system:

A+	97 - 100%
A	93 - 96%
A-	90 - 92%
B+	87 - 89%
B	83 - 86%
B-	80 - 82%
C+	77 - 79%
C	73 - 76%
C-	70 - 72%
D+	67 - 69%
D	60 - 66%
F	< 60%

ATTENDANCE POLICY

Attendance has been shown to be a key factor in academic success. Any absence, regardless of the reason, will prevent the student from getting the full benefit of the course. Therefore, students should recognize the advantages of regular and punctual class attendance, accept it as a personal responsibility and apprise themselves of the consequences of poor attendance.

Policy: Absences are controlled by faculty members. The number of absences for whatever reason (except as indicated in points 1.1, 1.2 and 1.3) is taken into account in the final grade.

1. Excused Absences: Students may be authorized by instructors to be absent from class for institutional reasons as specified in 1.1, and 1.2 below. However, the instructor may deny the student permission to be absent if the student's academic performance is not judged to be adequate. Once approved, these absences should not count in the student's absence record. Instructors should be informed before the absence to agree with the student on a suitable time and manner for a make up should it be necessary. A maximum of **three** of these absences per semester could be authorized.

1.1 External Events: student must submit a completed and signed form from the Office of Student Activities to the instructor. Examples of these absences include participation in university-sponsored sports, cultural or other events as a University representative.

1.2 Field Trips as part of a class requirement or as authorized by a Dean: the Dean's assistant of the school offering or authorizing the trip should sign the absence request form.

1.3 In case of protracted **illness** or emergency condition necessitating hospitalization, students may **exceptionally** appeal to the Vice President for Student Affairs so as not to be dropped from a course. However, extended illness may lead to the semester not being validated. No other justification will be accepted. Students should be prepared in case they have to be absent for personal or family reasons.

2. Impact of absences on grades: Each unauthorized absence shall result in a deduction from the class participation grade up to the limit set in section 3 below when a WF is assigned.

3. **Ceilings before a WF is assigned**
When a student exceeds the ceiling given below, the instructor may sign an administrative withdrawal form:
3.1 For classes which meet twice a week, this ceiling is set at 5 absences
3.2 For classes which meet three times a week, the ceiling is set at 7 absences
3.3 For classes which meet five times a week, the ceiling is set at 10 absences.

4. Pre-authorized absences: Notification of planned absences using the Absence Requests Form available at the Student Activities Office must be delivered to the instructor, with permission signed and dated by the instructor. Once notified of planned absence, the instructor should inform the student of the deadline for completion of any missed assignment or examination where applicable. Make-up examinations, if necessary and acceptable to the instructor, shall be at a time and place mutually agreed upon by the instructor and students.

4.1 Each week an email will be generated from the system to all students informing them about their absence record. The Vice President for Student Affairs or his representative will monitor the system and call in students with an attendance problem and direct them to the proper assistance service.

4.2 During the Add and drop period, no absence is accepted in a course; add and drop should be done outside class time.

4.3 In case of a late registration, students assume full responsibility for their absences as recorded from the first day of classes.

5. Administrative Withdrawal: When a student has exceeded the maximum number of absences according to the mentioned ceiling (except as stated in points 1.1 and 1.2); the instructor has the right to drop a student from a course with a "WF" grade. Special hardship cases as stated in 1.3 above may be referred by the Vice President for Student Affairs to the Dean/Director's appreciation. The "Administrative withdrawal form" must reach the Registrar's Office at least 5 days prior to the first day of final exams.