#### SYLLABUS FOR TMGT 3307 OPERATIONS MANAGEMENT SPRING 2016

| INSTRUCTOR:              | Dr. Xiao Li                             |
|--------------------------|---|
| OFFICE LOCATION:         | J216                                    |
| INSTRUCTOR OFFICE HOURS: | As Needed                               |
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### **COURSE DESCRIPTION**

In this course the student will learn to the essential topics that every managers needs to know about operations and supply –related activities in a company. This course is all about how to get the real work done effectively. The concepts of project management, manufacturing and service process design, capacity analysis, and quality management etc are all directly related to the knowledge students need to be a great supervisor in their organizations.

Prerequisites: Senior Standing. (3.0) [52.0203.0036]

Credit: 3 Semester Hours

This section will be delivered in a completely online format, and all work is to be submitted via the online classroom – weekly discussions, assignments, quizzes, and midterm exam and final exam.

### **REQUIRED TEXTS**

F. Robert Jacobs and Richard B. Chase. <u>Operations and Suppy Management: the Core</u>. 3<sup>nd</sup> Edition (2013) ISBN: 978-0-07-352523-5

Required course materials are available at the Brazosport College bookstore, on campus or online at <u>http://www.brazosport.edu/bookstore</u>. A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer.

### **COURSE LEARNING OBJECTIVES**

Upon successfully completing this course, students should be able to:

- A. Describe what Operations and Supply Chain Management is all about: its origins and how it relates to current business practices.
- B. Describe sustainability and triple bottom-line materials (people, planet, and profit)
- C. Understand strategic capacity management and production and service processes
- D. Related how product design decision have strategic significant for business organizations.
- E. Describe the basic concepts of quality management and six-sigma.
- F. Understand the role of forecasting as a basis for supply chain planning
- G. Show how to make a time series forecast using regression, moving average, and exponential smoothing.

- H. Use tools to manage and control inventories and scheduling to achieve profit and/or cost objectives while satisfying customers.
- I. Apply the basic concepts of short-range planning (i.e., scheduling production) and intermediaterange planning (i.e., aggregated planning) to various production environments.
- J. Explain the basic concepts related to supply chain management.

# STUDENT LEARNING OUTCOMES

### Students will:

- apply course concepts by individually completing weekly assignments. All assignments are to be submitted in the D2L learning management system by due date of assignment noted in the *Course Schedule* below
- apply course concepts and demonstrate written communication skills by responding online to weekly discussion questions and replying actively and substantively to other students postings. **Only postings made during the assignment week will be accepted for grading**. In online discussions students will be required to paraphrase and quote relevant course material, use technical vocabulary accurately, and express conclusions supported by appropriate factual data.
- demonstrate written, oral, and interpersonal communication skills and apply key course concepts by preparing a written and oral report of the term research project. Oral presentations will be made in live online sessions using *Wimba* conferencing based on technology available at the end of the semester.

demonstrate their knowledge of course concepts by performing successfully on a mid-term and final exam.

### STUDENTS WITH DISABILITIES

Brazosport College is committed to providing equal education opportunities to every student. Brazosport College offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact the Special Populations Counselor, 979.230.3236, for further information.

# **ACADEMIC HONESTY**

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the Brazosport College Student Guide for more information. This is available online at <a href="http://www.brazosport.edu">http://www.brazosport.edu</a>. Click on the CATALOGS AND SCHEDULES link under STUDENTS.

# **GRADING SYSTEM**

*Grading Scale:* 9-100% = A, 80-89 = B, 70-79% = C, 60-69% = D, Below 60% = F. (Please note that a grade of D will not be accepted in the B.A.T. program)

Student performance will be evaluated based upon the following criteria:

Students will be graded individually based on participation, quizzes, assignments, research paper, midterm examination, final examination, and a faculty assessment of each student.

| <u>Coursework</u>           | Points | <u>Percentage</u> |
|-----------------------------|--------|-------------------|
| Online Discussion Questions | 60     | 12%               |
| Quiz 1                      | 40     | 8%                |
| Quiz 2                      | 40     | 8%                |
| Assignments                 | 160    | 32%               |
| Mid-term Exam               | 100    | 20%               |
| Final Exam                  | 100    | 20%               |
| Total                       | 500    | 100%              |

# MAKE-UP POLICY

No make-up for Quizzes, Mid-term and final exams and no late assignments/discussion is accepted unless prior arrangement is made with the instructor.

# STUDENT RESPONSIBILITIES

Students are expected to fully participate in this course. The following criteria are intended to assist you in being successful in this course:

- a. understand the syllabus requirements
- b. use appropriate time management skills
- c. communicate with the instructor
- **d.** complete course work on time, and utilize online components (such as Desire2Learn) as required.

### **CLASS SCHEDULE:**

| Dates               | Readings/Topic   | <u>Assignments</u>  |
|---------------------|--|---|
| Week 1<br>1/11-1/17 | Ch 1: Operations and Supply Chain<br>Management<br>Introduction<br>Syllabus Overview<br>System Introductions | <ul> <li>Assignments (20 points):</li> <li>Review and Discussion Questions: Q2, Q3, Q6 &amp;Q7 at Page22</li> <li>Due date: 1/17</li> </ul> |
| Week 2<br>1/18-1/24 | Ch 2: Strategy and Sustainability  | Assignments ( <b>20 points</b> ):<br>• Key terms on page 40   |

Note: all the pages are referred to the required textbook

|                     |                                     | <ul> <li>Review and Discussion Questions: Q3 &amp; Q9 on page 41</li> <li>Problem 6 on page 42</li> </ul>   |
|---------------------|-------------------------------------|---|
|                     |                                     | Due date: 1/24  |
| Week 3              | Ch 3: Forecasting                   | Assignments (20 points):  |
| 1/25-1/31           |                                     | <ul><li>Key term on page 79</li><li>Problem 1, 4, 10, at Page85-87</li></ul>  |
|                     |                                     | Due date: 1/31  |
| Weeks 4<br>2/1-2/7  | Quiz 1 (40 points)                  | Covering Ch1 through Ch3.<br>Including 20 true/false and Multiple Choice Questions, each worth 2 points.  |
|                     |                                     | Due date:2/7  |
| Week 5<br>2/8-2/14  | Ch 4: Strategic Capacity Management | <ol> <li>Online Discussion(20 points)</li> <li>Assignments (20 points):</li> </ol>  |
|                     |                                     | <ul><li>Describe the key terms on page 111</li><li>Problem 2 at page 114</li></ul>  |
|                     |                                     | Due date:2/14   |
| Week 6              | Ch 5: Projects                      | Assignments (20 points):  |
| 2/15-2/21           |                                     | <ul> <li>Solve the problem 4, problem6a, b, c &amp; problem 8a,b,c. on page 162-164.</li> <li>Please describe the following key terms: 1) Project; 2) Project Management; 3) work breakdown structure; 4) Gantt chart; 5) Earned Value Management; 6) Critical Path; 7) Immediate predecessor; 8) Slack time;</li> </ul>  |
|                     |                                     | Due date:2/21   |
| Week 7<br>2/22-2/28 | Ch 6: Manufacturing Process         | Assignments (20 points):  |
|                     |                                     | <ul> <li>problem 8 at page 197</li> <li>Please describe the following key terms: 1) lead time; 2) customer order decoupling point; 3) inventory turn; 4) Little's law; 5) Assembly-line balancing; and 6) Precedence relationship.7) Project layout; 8) Product-process matrix; 9) Manufacturing Cell; 10) Lean Manufacturing.11) Total average value of inventory; 12) Make-to-order</li> <li>Due date:2/28</li> </ul> |

| Week 8<br>2/29-3/6   | <mark>Mid-term exam (100 points)</mark><br>(cover Ch1 through Ch 6)    | Mid-term exam covers Ch1 through Ch 6<br>25 multiple choice questions, each worth 4 points.<br>Due Date: 3/6 11: 59 pm   |
|----------------------|--|--|
| Week 9<br>3/7-3/13   | Spring Break   | No School Work   |
| Week 10<br>3/14-3/20 | Ch 7: Service Processes  | Online discussion ( <b>20 points</b> )<br>Due date:3/20  |
| Week 11<br>3/21-3/27 | Ch 8: Sales and Operations Planning                                    | Online discussion ( <b>20 points</b> )<br>Due date: 3/27   |
| Week 12<br>3/28-4/3  | Ch 10: Quality Management and Six<br>Sigma                             | <ul> <li>Assignments (20 points):</li> <li>Key terms on page 338</li> <li>Solve the problem 3 (refer to example 10.2), problem 4(refer to example 10.3), problem 7(refer to example 10.4), and Problem 8 (refer to example 10.5) on page 341-342</li> <li>Due date: 4/3</li> </ul> |
| Week 13<br>4/4-4/10  | Quiz 2 - 40 points   | Cover Ch7, Ch8 &Ch10. <b>20 True or False Questions</b> , each worth 2 points<br><b>Due date: 4/10</b>   |
| Week 14<br>4/11-4/17 | Ch12: Lean Supply Chain<br>& Ch 13: Global Sourcing and<br>Procurement | <ul> <li>Assignments (20 points):</li> <li>Please describe the Ch12 key terms on page 232 and Ch13 key terms on page 453</li> <li>Due date:4/17</li> </ul>   |
| Week 15<br>4/18-4/24 | Final Exam Preparation   |  |
| Week 16              | FINAL EXAMINATION (100   | This is Open-book Exam.  |

|  | Cover Ch7, Ch8, Ch10, Ch12& Ch13<br>25 True/false and multiple choice questions. Each worth 4<br>points |                |
|--|---|----------------|
|  |   | Due date: 4/28 |

#### **OTHER STUDENT SERVICES INFORMATION**

Information about the Library is available at <u>http://www.brazosport.edu/library</u> or by calling 979.230.3310.

For assistance with online courses, an open computer lab, online and make-up testing, audio/visual services, and study skills, visit Learning Services next to the Library, call 979.230.3253, or visit <a href="http://www.brazosport.edu/learningservices">http://www.brazosport.edu/learningservices</a>.

For drop-in math tutoring, the writing center, supplemental instruction and other tutoring including etutoring, visit the Student Success Center, call 979.230.3527, or visit <u>http://www.brazosport.edu/studentsuccesscenter</u>.

To contact the Social Sciences and Business Department call (979.230.3222).

The Student Services provides assistance in the following:

| Counseling and Advising | 979.230.3040 |
|-------------------------|--------------|
| Financial Aid           | 979.230.3294 |
| Student Life            | 979.230.3355 |

To reach the Information Technology Department for computer, email, or other technical assistance call the Helpdesk at 979.230.3266.