ET 3910 - Introduction to Operations Management 3 Credit Hours

Course Description:

This is a foundation course in manufacturing, service operations and supply-chain management that includes an emphasis on supply chain and logistics. Problem-solving applications are emphasized. Students will learn the basics of both traditional and modern topics in a global marketplace stressing the competitive dimensions of QCD (quality, cost and delivery/flexibility).

Course Outcomes:

The course objectives are to:

- 1. Instruct students on how to gain and maintain a competitive advantage through a working knowledge of all the elements of operations strategy and competitiveness.
- 2. Provide each student a foundation in QCD (quality, cost, and delivery/flexibility) that can be applied throughout his/her career in any business, industry, or service provider.
- Prove operations management concepts to students by use of real-world workplace examples that demonstrate current topics and activities in the manufacturing and service sectors (using streaming video clips from sources such as Society of Manufacturing Engineers).

The course consists of 13 modules that cover the broad subject matter of operations management. Each module will be assessed by a quiz to ascertain knowledge and an assignment to confirm understanding of textbook material, instructor material, and video clips from actual workplace experiences. The Discussion board will be monitored and students assessed for participation in, and contribution to, assignment preparations.

Prerequisites and Corequisites:

None

Course Topics:

Course topics are covered in 13 separate modules, with separate assessments for each:

- 1. Productivity and competitive position in a global market (modules 1 & 2);
- 2. Traditional & modern project management (module 3);
- 3. Human element in operations leadership, teamwork, and ergonomics (modules 4-6);
- 4. Work measurements for both direct and indirect labor (module 7);
- 5. Design for manufacture and assembly, DFMA (module 8);
- 6. Total Quality Management and SIX SIGMA (module 9);
- 7. Facility design considerations including free trade zones and layout for flow (module 10);
- 8. Just-In-Time supply chain management, and "lean" systems(module 11);
- 9. E-operations, E-commerce, and, inventory control(module 12);
- 10. Synchronous manufacturing and Theory of Constraints (module 13).

Specific Course Requirements:

Due to differences in editions of the textbook, the student must use the textbook "Table of Contents" or "Subject Index" (in back of book) to locate topics for study.

Learning Modules 4, 5 and 6 require additional research on the Internet or Library since topics are not covered extensively in the textbook.

Assignments must be uploaded in D2L "drop box" Word document on, or before, the Quiz due date for each learning module.

Students are required to check D2L email daily for any special instructions or updates.

Module Schedule and Due Dates for Assignments/Quizzes see course content within course.

Required Textbooks:

Please visit the <u>Virtual Bookstore</u> to obtain textbook information for this course. Move your cursor over the "Books" link in the navigation bar and select "Textbooks & Course Materials." Select your Program, Term, Department, and Course; then select "Submit."

Supplementary Materials:

Internet and/or Library research.

Hardware and Software Requirements:

Minimum hardware requirements can be found here.

Minimum software requirements can be found <u>here</u>.

Common applications you might need:

To read a PDF file download the latest version of <u>Adobe Reader here</u> Don't have Microsoft Word? Explore an alternative <u>OpenOffice here</u> Accessing a PowerPoint file? Download the <u>PowerPoint Viewer here</u>

Web Resources:

Purdue OWL Online Writing Lab (for APA, MLA, or Chicago style)

The Writing Center Online Writer's Handbook

Student Resources:

- Technical support information can be found on the <u>TN eCampus Help Desk</u> page.
- Smarthinking virtual tutoring is available FREE of charge. to access Smarthinking, visit
 the course homepage and select Smarthinking under Course Resources. You also
 view <u>sample sessions</u> to see what Smarthinking offers and how it works.
- Information on other student issues or concerns can be located on the <u>TN eCampus</u> <u>Student Resources</u> page.

Instructor Information:

Please see "Instructor Information" in the Getting Started Module for instructor contact information, virtual office hours, and other communication information. You can expect to receive a response from the instructor within 24-48 hours unless notified of extenuating circumstances.

Testing Procedures:

Testing consists of 13 on-line tests/quizzes (one for each course module), a Mid-Term Exam and a Final Exam.

- Quizzes are taken on-line (read instructions in D2L "Assessments" for each quiz carefully before taking EACH quiz, the mid-term, or the final exam).
- Student is given the opportunity to re-take each quiz twice with the final score being the highest of the three (each quiz is different). All 13 Quizzes are ten multiple-choice and questions may be re- visited.
- The Mid-Term & Final Exams may be taken only once and no question may be skipped or re- visited. The questions are both multiple choice and short answer in format.

Grading Procedures:

The 13 on-line quizzes are scored at 20 points per quiz (260 points maximum), with 13 assignments scored at 30 points each -- 20 points for content and 10 points for communication skills (390 points maximum); the on-line mid-term exam (110 points); and, final exam (240 points). Total maximum points is 1000. Quizzes and the exams are open book and open notes, but are to be taken without collaboration with others.

Grading Scale:

895-1000	A
795-894	В
695-794	С
595-694	D
<595	F

Assignments and Projects:

A sequenced list of assignments is provided in D2L under the "Dropbox" area. A set of instructions on how to use the dropbox is shown to the left side of each screen in the "Instructions" area.

Class Participation:

Students must participate and contribute to discussions held for each module on the Discussion board in D2L as part of the homework assignments. The grading Rubric describes the scoring criteria. Also, each student is expected to check D2L email daily (top bar menu item "EMAIL").

Late Policy:

Quizzes and homework must be completed for each module on time as indicated for each. Select "Calendar" and view "Month" to see how everything is scheduled for this course for one month at a time.

Course Ground Rules:

The following two statements (1., 2.) were derived from the TBR System-wide Student Rules document, released January 2012:

RULES OF THE TENNESSEE BOARD OF REGENTS STATE UNIVERSITY AND COMMUNITY COLLEGE SYSTEM OF TENNESSEE SYSTEMWIDE STUDENT RULES CHAPTER 0240-02-03 STUDENT CONDUCT AND DISCIPLINARY SANCTIONS

Read the document in its entirety here.

1. Standards of Conduct:

Students are required to adhere to the same professional, legal and ethical standards
of conduct online as on campus. In addition, students should conform to generally
accepted standards of "netiquette" while sending e-mail, posting comments to the

discussion board, and while participating in other means of communicating online. Specifically, students should refrain from inappropriate and/or offensive language, comments and actions.

2. Review the TN eCampus Academic Integrity/Academic Honesty Policy:

• In their academic activities, students are expected to maintain high standards of honesty and integrity. Academic dishonesty is prohibited.

Such conduct includes, but is not limited to:

- an attempt by one or more students to use unauthorized information in the taking of an exam
- to submit as one's own work, themes, reports, drawings, laboratory notes, computer programs, or other products prepared by another person,
- or to knowingly assist another student in obtaining or using unauthorized materials.

Plagiarism, cheating, and other forms of academic dishonesty are prohibited.

Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are subject to disciplinary action through the regular procedures of the student's home institution. Refer to the student handbook provided by your home institution to review the student conduct policy.

In addition to other possible disciplinary sanctions that may be imposed, the instructor has the authority to assign an "F" or zero for an activity or to assign an "F" for the course.

Other Course Rules:

Students are expected to:

- Participate in all aspects of the course
- · Communicate with other students
- Learn how to navigate in Brightspace
- Keep abreast of course announcements
- Use the assigned course management (Brightspace) email address rather than a personal email address
- Address technical problems immediately:
 - Contact Technical Support
 - View Term Calendar here
- Observe course netiquette at all times.

Email:

- Always include a subject line.
- Remember without facial expressions some comments may be taken the wrong way. Be careful in wording your emails. Use of emoticons might be helpful in some cases.
- · Use standard fonts.
- Do not send large attachments without permission.
- Special formatting such as centering, audio messages, tables, html, etc. should be avoided unless necessary to complete an assignment or other communication.
- · Respect the privacy of other class members

Discussions:

- Review the discussion threads thoroughly before entering the discussion. Be a lurker then a discussant.
- Try to maintain threads by using the "Reply" button rather starting a new topic.
- Do not make insulting or inflammatory statements to other members of the discussion group. Be respectful of other's ideas.
- Be patient and read the comments of other group members thoroughly before entering your remarks.
- Be cooperative with group leaders in completing assigned tasks.
- Be positive and constructive in group discussions.
- Respond in a thoughtful and timely manner.

Library:

The <u>Tennessee Virtual Library</u> is available to all students enrolled in TN eCampus programs and courses. Links to library materials (such as electronic journals, databases, interlibrary loans, digital reserves, dictionaries, encyclopedias, maps, and librarian support) and Internet resources needed by learners to complete online assignments and as background reading will be included within the course modules. To access the Virtual Library, go to the course homepage and select the *Virtual Library* link under Course Resources.

Students with Disabilities:

Qualified students with disabilities will be provided reasonable and necessary academic accommodations if determined eligible by the appropriate disability services staff at their home institution. Prior to granting disability accommodations in this course, the instructor must

receive written verification of a student's eligibility for specific accommodations from the disability services staff at the home institution. It is the student's responsibility to initiate contact with their home institution's disability services staff and to follow the established procedures for having the accommodation notice sent to the instructor.

Syllabus Changes:

The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting both notification and nature of change(s) on the course bulletin board.

Disclaimer

The information contained in this syllabus is for general information purposes only. While we endeavor to keep this information up-to-date and accurate, there may be some discrepancies between this syllabus and the one found in your online course. The syllabus of record is the one found in your online course. Please make sure you read the syllabus in your course at the beginning of the semester. Questions regarding course content should be directed to your instructor.