The University of Texas at Tyler
College of Business and Technology
Department of Human Resource Development and Technology

Syllabus

Course: TECH 3324
Title: Facilities Planning
Section: 01
Semester: Spring 2014
Class Time: W 6pm-8:40pm

Instructor: Dr. Dominick E. Fazarro, Ph.D.
Office: 242
Office Hours: M 11-12am; W 11-12am,
Other Availability: N/A
Phone: 903.565.5911
Email: dfazarro@uttyler.edu
Preferred Contact: N/A

Course Content:
This course is designed to provide the student knowledge and experience in designing an efficient manufacturing facility layout with techniques and procedures.

Course Learning Objectives:
These are the objectives for this course:

- Define product, process and schedule design requirements of facilities planning
- Identify activity relationships and space requirements for the manufacture of specific products
- Evaluate personnel needs for specific goods production
- Develop alternatives, concepts and techniques related to material handling
- Produce a complete plant layout for the manufacture of a specific product
- Become familiar with concepts of computer-aided layout designs
- Develop alternatives/functions for receiving and shipping, storage, manufacturing, office and facilities
- Develop quantitative approaches relating to deterministic and probabilistic models
- Evaluate and select facilities plan from exterior sources
- Prepare and present the facilities plan to upper-level management

Required Textbook:
ISBN-10: 1557536503

Course Learning Objectives:
Students completing this course should be able to:

- Define product, process and schedule design requirements of facilities planning by successfully passing quizzes and exams with a 70% or better.
- Understand to use appropriate equations to calculate/solve takt time and other production solutions by successfully passing quizzes and exams with a 70% or better.
- Understand concepts and techniques related to material handling by successfully passing quizzes and exams with a 70% or better.
- Evaluate personnel needs for specific goods production by successfully passing quizzes and exams with a 70% or better.
Student Learning Outcomes

At the end of the course, students learning outcomes should be aligned with the Industrial Technology program outcomes:

<table>
<thead>
<tr>
<th>Program Outcomes</th>
<th>TECH 3324</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An ability to apply the knowledge to practical uses of management</td>
<td>X</td>
</tr>
<tr>
<td>2. An ability to plan and assess problems to determine viable solutions</td>
<td>X</td>
</tr>
<tr>
<td>3. An ability to design a system, component, or process to meet desired needs.</td>
<td>X</td>
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<tr>
<td>4. An ability to use communication and writing skills</td>
<td>X</td>
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<td>5. An understanding of professional and ethical responsibility</td>
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<td>6. An ability to communicate effectively.</td>
<td>X</td>
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<tr>
<td>7. An awareness of the impact of engineering and technology solutions in a</td>
<td></td>
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<td>global and societal context.</td>
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<td>8. An awareness and commitment for lifelong learning.</td>
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</table>

Course Competencies

- **Communication skills**: Each student will be able to effectively communicate orally along with written reports describing the operations and techniques needed for plant layout.

- **Interpersonal skills**: Each student will engage in cooperative learning for building working relationship within the groups.

- **Problem-Solving**: Each student will gather and use critical-thinking skills to develop a facility plan for maximum production and efficiency.

Assignments

- Calculations for operation efficiency
- Internet (Research) Assignments
- Assigned reading materials
- Midterm
- Progress reports
- Final project

Learning-Management

Students will be able to view announcements, course progress, and retrieve some assignments using Blackboard™. This technology enable students to be proactive in their learning and effective communication between the student and instructor. Review of tests/midterm will be provided by TREGITY, which allows students to go online to listen to the instructor’s review of each exam.
Grading Policy and Criteria to Determine Final Course Grade:

Exploration trips, videos, and guest speakers will be supplemental to the course

Weighted grade distributions:

- Internet (Research) Assignments (20pts) (10%) =220 points possible
- Book Assignments (30pts) (15%) =330 points possible
- Test (2 x 100) (20%) =200 points possible
- Midterm (100 pts) (20%) =100 points possible
- Progress Reports (20pts) (10%) =220 points possible
- Final project (200pts) (30%) =200 points possible

TOTAL =1270 POINTS

Please refer to the point accumulation break down for each letter grade

A = 1270-1143
B = 1142-914
C = 913-639
D = 638-383
F = BELOW 383

Final Exam Date:
May 7, 2014

Date to Withdraw Without Penalty:
March 26, 2014

Calendar/Schedule:

<table>
<thead>
<tr>
<th>Date/Assign. work</th>
<th>No.</th>
<th>Topic/Activity</th>
<th>Reading (Pgs.)/DUTE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/15</td>
<td>1</td>
<td>Orientation/Chapter 1- Introduction to Manufacturing…</td>
<td>1-21</td>
</tr>
<tr>
<td>1/15</td>
<td></td>
<td>Assignment</td>
<td>JAN 22</td>
</tr>
<tr>
<td>1/22</td>
<td>2</td>
<td>Chapter 2-Sources of Information for Manufacturing…</td>
<td>22-41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assignment</td>
<td>JAN 29</td>
</tr>
<tr>
<td>1/29</td>
<td>3</td>
<td>Chapter 3-Time Study</td>
<td>42-84</td>
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<tr>
<td></td>
<td></td>
<td>Assignment</td>
<td>FEB 5</td>
</tr>
<tr>
<td>2/5</td>
<td></td>
<td>EXAM 1</td>
<td>FEB 5</td>
</tr>
<tr>
<td>2/12</td>
<td>4</td>
<td>FINAL PROJECT/SERVICE LEARNING REQUIREMENTS &amp; ESTABLISHING GROUPS</td>
<td>FEB 12</td>
</tr>
<tr>
<td>2/12</td>
<td>5</td>
<td>Chapter 4-Process Design</td>
<td>86-113</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assignment</td>
<td>FEB 19</td>
</tr>
<tr>
<td>2/19</td>
<td>6</td>
<td>Chapter 5-Flow Analysis Techniques</td>
<td>115-144</td>
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<tr>
<td>2/19</td>
<td>7</td>
<td>Chapter 6-Activity Relationship Analysis</td>
<td>145-156</td>
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<tr>
<td></td>
<td></td>
<td>Assignment/Progress Report due</td>
<td>FEB 26</td>
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<tr>
<td>3/10-14</td>
<td></td>
<td>SPRING BREAK</td>
<td>3/10-14</td>
</tr>
<tr>
<td>3/19</td>
<td>9</td>
<td>MID TERM CHAPTERS 1-6</td>
<td>3/19</td>
</tr>
<tr>
<td>3/26</td>
<td>10</td>
<td>Chapter 7-Ergonomics and Workstation Design…</td>
<td>158-173</td>
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</tbody>
</table>
Using Blackboard for Turning in Assignments
Blackboard will be the tool for communication and turning in assignments. **ALL ASSIGNMENTS WILL OPEN UP AT 7AM ACCORDING TO THE ISSUE ASSIGN DATE IN THE LEFT-HAND COLUMN OF THE CALENDAR/SCHEDULE TABLE AND TURNED IN PROMPTLY AT 11PM.** Folders will be created for each assignment to upload your assignments along with a due date. IF YOU DO NOT MEET THE DUE DATE FOR THE ASSIGNMENT, THE FOLDER WILL DEACTIVATE OR DISAPPEAR, THEREFORE; YOU WILL NOT BE ABLE TO TURN YOUR ASSIGNMENT TO RECEIVE CREDIT. The only exception to turn in an assignment after the due date is if you are ill (with a written excuse) or technical difficulties. **IT IS YOUR RESPONSIBILITY TO COMMUNICATE WITH TECHNICAL SERVICES TO RESOLVE YOUR BLACKBOARD MALFUNCTIONS.**

Supplies
1”-2” three ring notebook and a flash drive (2G or 8G)

Attendance and Make-Up Policy:
Attendance is expected in this course in order to achieve maximum learning for all participants. Unforeseen circumstances do sometimes arise, so periodic absences may occur. If you find that you must miss a class meeting, please contact the instructor prior to the start of class. Please be on time. If you must arrive late, let the instructor know prior to the start of class. Laptops are permitted but the wireless internet card must be disabled during the class. Also, cell phones must be turned off and put away during class.

If a student is sick or have a death in the immediate family, the instructor will discuss the arrangements for turning in make-up work. The student must have written proof to make up an assignment or exam.

Writing Assistance
Each student is entitled to free writing assistance in the Writing Center. Students who take advantage of this service will receive five extra points on essay grades if they take their drafts to the Writing Center. The student must provide documentation that he or she received assistance in the Center. **An appointment is strongly advised.**

Required Activities Scheduled Outside of Regularly-Scheduled Class time (fees, tickets, procedures and/or forms required):
There will be one exploration trip for the semester. More information will be provided once the course begins.

Department Website: www.uttyler.edu/hrdt
Students Rights and Responsibilities
To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: http://www2.uttyler.edu/wellness/rightsresponsibilities.php

Grade Replacement/Forgiveness and Census Date Policies
Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at http://www.utttyler.edu/registrar. Each semester’s Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar. Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.
The Census Date is the deadline for many forms and enrollment actions that students need to be aware of. These include:
- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a “W” grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

State-Mandated Course Drop Policy
Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).
Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

Disability Services
In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including non-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria applies to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@uttyler.edu

Student Absence due to Religious Observance
Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

Student Absence for University-Sponsored Events and Activities
If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

**Social Security and FERPA Statement:**
It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

**Emergency Exits and Evacuation:**
Everyone is required to exit the building when a fire alarm goes off. Follow your instructor’s directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

**Expected Classroom Etiquette**
The University of Texas at Tyler is committed to promoting a level of classroom etiquette that is conducive to maximum teaching and learning. Therefore, the following etiquette is expected of students:

1. Attend class each time the class meets.
2. Be on time for class and remain for the entire period. Students are inconsiderate of their classmates when they arrive late and leave early.
3. Refrain from talking while the teacher or another student is lecturing. Idle chattering and giggling are disruptive to the class and disrespectful to the teacher and classmates.
4. Without prior approval from the instructor, students are not allowed to use cell-phones, devices with earphones in class. **LAPTOPS MAY BE USED FOR TAKING NOTES ONLY!!!!**
5. Be attentive and participate in class.
6. Refrain from eating and drinking in the classroom.
STATEMENT OF AGREEMENT

I (print name) _____________________________ understand the contents of the syllabus and is responsible for all assignments, tests, and any other activities stated and understand all due dates for assignments, tests, and any other activities in the syllabus for the course TECH 3324 Facility Planning for the Spring semester 2013.

Sign___________________________

Date___________________________________