



ITEC 3340 783
Facilities Design
Fall 2020 Session 8W1
Delivery Method: Online

Instructor Information



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Office Hours: Posted in Canvas (Fall 2020 COVID Virtual Office Hours Only)

Course Information

Class Location: Online

Web Conference Hours

Microsoft Meetings or Skype by appointment.

Course Description

Study of techniques and procedures for developing efficient facilities layout.

Course Catalog Description: Study of techniques and procedures for developing efficient facilities layout

Purpose: This course provides a basic understanding of the concepts, science, and strategic decision processes associated with locating and designing facilities.

Prerequisites: There are no prerequisites for this course

General Topics: Facility location, facility layout, material flows, warehousing

Target Audience: Junior/Senior

Required for any specific major: Major elective for online BAAS in Industrial Technology, B.S. Industrial Technology.

Student Learning Outcomes

- By the end of this course, you should be able to:
 - Explain how facility design can enhance customer satisfaction
 - Explain how facility design can enhance Return on Assets
 - Explain how facility design can reduce costs and grow supply chain profitability
 - Identify methods to effectively utilize people, equipment, space and energy in facilities
 - Identify methods to enhance ease of maintenance in facilities
 - Identify safety hazards in facilities

Required Materials

Title: Facilities Planning

ISBN: 978-0-470-44404-7

Authors: Tompkins, White, Bozer, Tanchoco

Publisher: Wiley

Publication Date: 2010

Edition: 4th Edition

Title: Broadband Internet connection and a computer with webcam and microphone capable of running Respondus Lockdown Browser for taking exams. Respondus Lockdown Browser is free and downloaded using the link below.

Link: <http://www.respondus.com/lockdown/download.php?id=841715130>

Important Academic Dates

UTPB [Academic Calendar](#)

Graded Material

Course Activity	Points	Total Points
Quizzes	3/100	300
Discussions	8/20	160
Safety Assessment Project	1	100
Total Points		560

Grading Scale

90.00 and above = A

80-89.999 = B

70-79.999 = C

60-69.999 = D

<70 = F

(- 0, 1, 2) (+ 7, 8, 9)

University Policies

Accommodation for Students with Disabilities

Students with Disabilities: The University of Texas Permian Basin in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act provides “reasonable accommodations” to students with disabilities. Only those students, who an Instructor has received an official Letter of Accommodation (LOA) sent by the Office of ADA for Students, will be provided ADA academic accommodations.

ADA Officer for Students: Mr. Paul Leverington

Address: Mesa Building 4242/4901 E. University, Odessa, Texas 79762

Voice Telephone: 432-552-4696

Email: ada@utpb.edu

For the accessibility and privacy statements of external tools used within courses, go to [Accessibility and Privacy Statements](#).

Sexual Harassment/Sexual Misconduct Policy

You may report incidents of sexual misconduct to any University employee. They are obligated to report any incident to the Title IX Coordinator or Deputy Coordinator.

You may also contact:

The UTPB Police Department at 432-552-2786

The Title IX Coordinator at 432-552-2697 or TitleIXCoordinator@UTPB.edu.

The Dean of Students at 432-552-2600

Reports can also be made via the University Complaint Portal: [UTPB Complaint Management](#)

A **confidential reporting option is available**. Please contact UTPB's Counseling Center at 432-552-3365 or 432-552-2367 or stop by MB 1150.

Student Success at UTPB

UT Permian Basin offers numerous services to help you reach your academic goals. Available both in the Success Center on the 2nd Floor of the Mesa Building (<https://www.utpb.edu/academics/advising-and-support/student-success-center/index>), and online, UTPB Student Success offers the following services to all students:

- O.W .L. (Online Writing Lab) - Submit essays that need to be revised by one of our tutors to owl@utpb.edu.
- Tutoring - For both online and in person tutoring, please use EAB to create an appointment. (Utpb.campus.eab.com) Sign in using UTPB credentials.
- SI/PLTL Sessions - If available for your class, will be communicated to you by the mentor assigned to your class section and students can communicate to their SI or PL through Canvas.
- Peer Mentoring - Incoming freshmen can be paired with a peer mentor who will help you navigate your first year on campus.
- SSC Computer Lab - Come take advantage of the state-of-the-art computers available at the Student Success Center.

Please email success@utpb.edu for more information.

Course Modalities

Both the Texas Higher Education Coordinating Board (THECB) and the Southern Association of Schools and Colleges Commission on Colleges (SACSCOC) provide

standard definitions for basic course types/modalities that have informed the following adopted course definitions.

Online Courses are those in which more than 85 percent of the planned instruction occurs online/virtually (asynchronously) when students and faculty are not in the same place. A fully online course is one in which mandatory in-person meetings occur no more than 15% of the planned instructional time.

Remote Courses are ones in which students, while not required to physically come to campus to attend in-person classes, are required to “attend” virtually/remotely (synchronously) during scheduled days and times, with students expected to log in and participate in the lecture via video conferences.

Hybrid Courses are courses in which the majority (more than 50% but less than 85%) of the planned instruction occurs when students and instructor(s) are not in the same place. This form of instruction offers a mix of on-campus/in-person and remote/online/electronic learning.

HyFlex Courses are those which, like hybrid courses, offer a mix of on-campus/in-person and remote/online/electronic learning. These courses, however, do not require student authentication since at least 50% of the planned instruction occurs when students and instructor(s) are in the same place.

Face-to-Face/In-Person Courses are those in which more than 85 percent of the planned instruction occurs when students are in the same place with an instructor(s).

Distance Education Policy

Distance Education Courses and Student Identity Authentication Requirements and Policy

SACSOC defines a distance education course as one in which more than 50 percent of the planned instruction occurs when students and instructor(s) are not in the same physical place. Distance education courses, therefore, include online, remote, and hybrid courses as defined above. Per SACSCOC and University policy, all distance education courses are required to follow our Distance Education Student Authentication Policy procedures (please see below), and these requirements and policies must be stated in the course syllabus. Further, any projected additional student charges associated with verification of student identity must be indicated on the courses schedule and course syllabus.

The Distance Education Student Authentication Policy does not apply to Hyflex Courses--those in which at least 50% of the planned instruction occurs when students and instructor(s) are in the same place--and Face-to-Face/In-Person Courses--those in which more than 85 percent of the planned instruction occurs when students and instructor(s) are in the same place. Student authentication and identity verification in these courses may be accomplished by in-person attendance monitoring as well as through in-class instructor proctored examinations and other assessments. These same “in-class” authentication procedures also may be employed in hybrid courses, but in the case of these defined distance education courses, they must be documented on the course syllabus as described below.

Distance Education Student Authentication Policy and Syllabus Requirements

UT Permian Basin’s Distance Education Student Authentication Policy requires the University to employ processes (documented in each distance education syllabus) to verify that each student who registers for a distance education course is the same student who participates in, completes, and receives credit for the course.

The policy requires faculty members teaching distance education courses to employ at least two methods of verification to ensure student identities. The first method of verification is accomplished by the student logging into Canvas, our learning management system. To access all UTPB courses, students must login to Canvas uniqueness personal identifying username and secure password. This is the primary method of student identity verification. The Distance Education Student Authentication Policy requires at least one additional student identification method within the distance learning course that has been determined and approved by the faculty or academic program. The second method of authentication must be explicitly stated in the syllabus. The second method of student authentication maybe:

- Proctored exams using an approved photo ID*.
- Presentation of approved photo ID through a webcam and optional levels of proctoring during assessment.
- Field or clinical experiences using an approved photo ID.
- Synchronous or asynchronous video activities using an approved photo ID.
- In hybrid distance education courses, which have an in-person meeting component, the secondary method of student authentication may be accomplished (as is it may be done in hyflex and face-to face-courses) by in-person attendance monitoring as well as through required in-class instructor proctored examinations and other assessments.
- Other Technologies or procedures, etc. (which must be detailed in the syllabus).

If faculty require secondary method of verification for which students are charged a fee (e.g. face-to-face proctoring at an off-campus site that charges a fee), this notification must be stated on the course schedule and in the course syllabus as well.

*Approved photo identifications include passports, government issued identification, driver's licenses, military ID from DoD; dual credit and early college high school students use school district identifications.

This course uses Respondus Lockdown Browser with Monitor and the presentation of an approved Photo ID for identification.

Course Policies

QUIZ POLICY

Since the quiz grades are adjusted based on class performance it is a requirement that everyone take the quizzes following the same rules; therefore, quiz procedure is a SERIOUS ISSUE. **Failure to follow quiz procedure strictly will result in a minimum of a 10 points deduction from the quiz for things like not showing an ID, not showing a full environment view, not having your face fully in the camera's frame, wearing a hat or dark glasses, or being in a dark room, to receiving a final grade of F and being reported to the Dean of Students Office for Academic Dishonesty for things like covering the camera, adjusting the camera to look away from your face, using books, using notes, using another devices, help from other people, or continually looking off the screen or leaving the computer during the exam.** The list of behaviors stated are just a few examples, any suspicious behavior will result in action being taken. **All videos flagged by Respondus for review by the instructor are reviewed, so do not do things that get your video flagged to avoid losing points or worse.** Videos not flagged are reviewed at random. To avoid problems simply sit in front of your computer in a well-lit room with the camera directly in front of you looking directly on your face, show your ID and the environment, and take the exam while not looking away from the monitor. **Respondus uses artificial intelligence to monitor the student's actions during the exam.**

All quizzes in this course use Respondus Lockdown Browser with Monitor using webcam and microphone. It is a requirement to have a device with webcam and microphone for this course, no exceptions. During the exam absolutely no resources are allowed. This means no books, no notes, no other computers or tablets, and no cell phone or help

from other people. The only exception is that in classes that require calculations you may have 1 piece of blank paper (you must show front and back at start of video) and a pencil or pen. Respondus has a calculator built into it.

You must show a photo ID, driver license, student ID, passport, when prompted to do so. You also need to move the camera, or the laptop or monitor if the camera is built into it, to show the area around you to prove there are no books, notes, or devices near you. Respondus uses artificial intelligence to monitor the student's actions during the exam. If it does not see your face clearly, it alerts you and flags the exam for review by the instructor. If you are continuously looking away from the screen it notes that behavior and flags the video for review by the instructor, but it does not inform the student. To avoid this situation, take the exam in a well-lit room with the light coming from behind the camera toward your face. Do not have the light, such as a lamp or a window, coming from behind your head toward the camera because it causes the camera to adjust and black out your face, and that flags the video for review. Do not wear a hat or dark glasses. Also, do not have a photo of a person on the wall behind you as the system will flag it for two people being in the frame.

GRADING

All the course activities will be graded within approximately one week after the set due date; however, this varies depending on the number of courses the instructor is teaching and how many students there are in the classes. You can check your grades by going to Grades in Canvas. If there is any discrepancy in the grade, you must contact me immediately via the Canvas Internal Messaging Tool. Assignments are graded according to the point value allocated in the course assessment section.

QUIZZES

Quizzes are major exams, the term Quiz or Quizzes is used to avoid confusion because Canvas labels them as "Quizzes"

At the end of the course the course I will evaluate the Quiz score mean and median for the entire class, with the low outliers of students who stopped participating removed. I will then adjust the total point value of each student by exactly the same value, up or down, to obtain a mean or median, whichever is higher, of approximately 78 -82% based on the instructors evaluation of the distribution. This methodology results in a cumulative exam grade for each student based on how they performed relative to peers taking exactly the same course with exactly the same assignments at exactly the same time. The exams are intended to be rigorous; however, the grading system insures a reasonable grade distribution. Discussion and paper grades are not included in the adjustment because there is no excuse for missing or not doing well on those

assignments. This method usually results in the most frequent final grade for the course being a B.

INDIVIDUAL PAPER OR PROJECT

In the Paper or Project assignment Rubric, 80 points are awarded based on the appropriateness of the site/topic to the course and quality of sources and quality of the content. There will be a major point deduction for excessive use of quotations to fill the paper by copy/paste/cite to create a paper, no more than 20% should be direct quotes. Ten points are awarded based on grammar and writing style and 10 points are awarded based on APA Style formatting. You may not recycle a paper submitted from a previous course, some refer to this as self-plagiarism. If the class has an individual paper, as opposed to a project submission, it should be 2,000 to 3,000 words (about 6 to 8 double spaced pages with 1 inch margins and 12 point font not including cover pages, reference pages, bullet points, charts, graphs, or images). Follow the American Psychological Association (APA) style and be sure to use headings and subheadings. There are plenty of online tutorials for APA style. There should be a minimum of 4 references, preferably from peer-reviewed academic journals, which you can access through the UTPB Library databases, EBSCO, Business Source Complete, or reputable news sources or company websites.

DISCUSSION BOARDS

RUBRIC: There will be 8 graded discussion topics (7 for summer courses) for the term. Each discussion topic is worth 20 points; 5 points for initial posting on first two days of the week and up to 5 points for the quality and quantity (200+ words) of the initial posting and up to 5 points for each for the quality and quantity (75+ words) of the 2 required responses to other students. For each graded discussion question, first, you must respond to the question directly during the first 2 days of the week and second, you must read the other students posts and reply to at least two other students' responses. You must ensure that the responses to the questions are meaningful, reflective, refer to personal experience and support your course readings. Avoid postings that are limited to 'I agree' or 'great idea', etc. If you agree (or disagree) with a posting then say why you agree by supporting your statement with concepts from the readings or by bringing in a related example or experience. You are responsible for reading all of the messages that are posted in the online discussion. Not reading messages is the equivalent of sleeping in class. Use a person's name in the body of your message when you reply to their message. It helps to keep all of us oriented. It helps us maintain a clearer sense of who is speaking and who is being spoken to. As we begin to associate names with tone and ideas, we come to know each other better.

MAKE-UP/LATE SUBMISSION POLICY

Discussion boards are not allowed after the due date and no late submissions are permitted for any last week (Week 8 Spring and Fall, Week 7 Summer), assignments.

Quiz Makeup: There is not any opportunity to take a missed quiz; however, a very long comprehensive Makeup quiz will open the last week of class. The Quizzes are open from the first day of class up to the due date and there are multiple attempts. The best practice is to take your first attempt several days before the due date to assure you do not miss the quiz. If any student misses Quiz 1 or Quiz 2 for any reason, they may replace that 0 with the Makeup Quiz; however, taking the Makeup Quiz results in a final class grade no higher than C-. This is essentially like a "Hail Mary" pass in football that gives you a chance to make a grade that will count toward graduation to avoid having to retake the pass. The Makeup quiz DOES NOT REPLACE THE LOWEST QUIZ GRADE, so those who did not miss Quiz 1 or Quiz 2 should not take it if they desire a grade higher than C-. Since the Makeup quiz is long, difficult, and covers the whole course, the likelihood of making a grade higher than the lowest quiz grade is remote anyway.

Paper or Project Late Submissions: Late submissions for assignments will be up to 3 days with up to a 25% deduction for each day.

Course Schedule

Sample Syllabus

Week	Assignments/Activities/Topics	Due Date
Week 1	Topics: Course Overview	
Week 1	Reading: Reading materials in Canvas	
Week 1	Activities: View Assigned Videos Complete Introduction Discussion by end of Week	Sun Aug 30
Week 2	Topics: Introduction to Facilities Planning and Processes	
Week 2	Read: Chapters: Ch 1 Introduction and Ch 2 Product, Process & Schedule Design	
Week 2	Activities:View Assigned Videos	
Week 2	Complete Week 2 Discussion (Initial post by day 2)	Sun Sep 6
Week 3	Topics: Flow, Space, and Personnel Requirements	
Week 3	Read: Chapters: 3 Flow Systems, Activity Relationships, Space Requirements Chapters: 4 Personnel Requirements	
Week 3	Activities: View Assigned Videos	
Week 3	Complete Week 3 Discussion (Initial post by day 2)	Sun Sep 13
Week 4	Topics: Material Handling and Layout Planning	
Week 4	Read: Chapters 5 Material Handling, Appendix 5 Chapters: 6 Layout Planning Models and Design Algorithms	
Week 4	Activities: View Assigned Videos	
Week 4	Complete Week 4 Discussion (Initial post by day 2)	Sun Sep 20
Week 4	Complete Canvas Quiz 1 by last day of Week 4	Sun Sep 20
Week 5	Topics: Warehousing and Manufacturing Operations	
Week 5	Read: Chapters: 7 Warehouse Operations Chapters: 8 Manufacturing Systems	
Week 5	Activities: View Assigned Videos	
Week 5	Complete Week 5 Discussion (Initial post by day 2)	Sun Sep 27
Week 6	Topic: Facility Systems	

Week 6	Read: Chapter: 9 Facility Systems Chapter: 10 Quantitative Facilities Planning Models	
Week 6	Activities: View Assigned Videos	
Week 6	Complete Week 6 Discussion (Initial post by day 2)	Sun Oct 4
Week 6	Submit Individual paper .doc, .docx, .rtf file by last day of Week 6	Sun Oct 4
Week 7	Topics: Evaluating, Selecting, Presenting, and Implementing the Facilities Plan	
Week 7	Read: 11 Evaluating and Selecting the Facilities Plan Chapter: 12 Preparing, Presenting, Implementing, and Maintaining the Facilities Plan	
Week 7	Activities: View Assigned Videos	
	Complete Week 7 Discussion (Initial post by day 2)	Sun Oct 11
Week 7	Complete Canvas Quiz 2 by last day of Week 5	Sun Oct 11
Week 8	Topics: Course Reflection	
Week 8	Complete Week 8 Reflective Discussion (Initial post by day 2)	FRIDAY Oct 16
Week 8	Complete Canvas Quiz 3 by last day of Week 8	FRIDAY Oct 16
Week 8	Complete Makeup Quiz - ONLY IF Missed Quiz 1 or Quiz 2	FRIDAY Oct 16