

MIME 4160 – Facilities Planning and Design

Spring 2008

Classroom: PL 2400 (Palmer Hall)
Classes: Tuesdays and Thursdays 5:00 PM to 6:15 PM
Instructor: Dr. Matthew Franchetti
Phone: 419-530-8051
E-mail: matthew.franchetti@utoledo.edu (best way to get in touch with me)
Office: NI 4006-E
Office Hours: After class or by appointment

Textbook: Facilities Planning, Tompkins, 4nd Edition by James Tompkins, John White, Yavuz Bozer, JM Tanchoco, John Wiley & Sons, 2003

Prerequisite: MIME - 3710 Work Design and Measurement (or instructor permission)

Course Description: Planning, design, development, management and control of production and distribution systems to effectively distribute goods and services from the producer to end user. Aspects of facilities for manufacturing, material handling, packing and distribution, concepts of group technology, and computer aided facility design and utilization of optimal plant design are covered.

Course Objectives:

- Understand the strategic facilities planning process
- Determine the interrelationship among activates (product/process/schedule/facilities design and flow/space/activities)
- Understand space and personnel requirements
- Determine material handling equipment
- Develop and plan layout plans for a facility
- Develop efficient warehouse storage system layouts
- Understand manufacturing and facilities systems
- Integrate and analyze all the components of facilities design
- Evaluate, present, implement, and maintain facility plans

Grading:	Homework	10%
	Examination 1	25%
	Examination 2	25%
	Final Examination	25%
	<u>Research Project</u>	<u>15%</u>
	TOTAL	100%

- Any act of dishonesty may result in a grade of 'F' or a dismissal from the class in accordance with University of Toledo and College of Engineering academic policy.

Grading Scale:	100 – 90 A/A-	69 – 60 D+/D-
	89 – 80 B+/B-	59 – 0 F
	79 – 70 C+/C-	

Homework: Homework will be assigned regularly and be due at the beginning of class on the date specified. The homework will be discussed in the following class. Late homework subject to a 15% per day deduction and will not be accepted after it is discussed in class without a valid excuse. Homework will be graded 60% on effort and 40% on correctness. Extra credit may be given for exceptionally neat homework. It will be to your advantage to completely understand the homework, as exams may strongly reflect the assigned problems.

Examinations: Exams will NOT be comprehensive and will last the entire class period. *Make-up exams will not be given except in extreme documented circumstances and then only upon arrangement made prior to the scheduled examination.*

Research Project: A class research project will be announced later in the semester relating to a facilities planning and design. The project will contain group and individual portions. Project reports are due on Thursday April 10, 2008.

If you have any questions or comments regarding the class or course material please see me or e-mail me. I will be more than happy to discuss these issues with you.

Class Schedule: (Subject to Change)

Week Starting	Chapters	Material Covered
Jan. 8	1	Introduction and Syllabus
Jan. 15	2	Product, Process, and Schedule Design
Jan. 22	3	Flow, Space, and Activity Relationships
Jan. 29	3/4	Flow, Space and Activity/Personal Requirements
Feb. 5	5	Material Handling
Feb. 7	EXAM 1: Chapters 1 – 4	
Feb. 12	5	Material Handling
Feb. 19	6	Computer Aided Layout Planning (CALP)
Feb. 26	6/7	CALP/Warehouse Operations
March 1	Last Day to Withdraw	
March 4	SPRING BREAK: March 3 – 7 (No Class)	
March 11	8	Manufacturing Systems
March 18	8	Manufacturing Systems
March 20	EXAM 2: Chapters 5 – 8	
March 25	9/10	Facilities Systems/Quantitative Facilities Planning Models
April 1	10	Quantitative Facilities Planning Models
April 8	11/12	Evaluating, Selecting, Preparing, Presenting, and Implementing the Facilities Plan
April 10	Research Projects Due	
April 15	-	Special Topics and Presentations
April 22	-	Catch up and Review
May 1	FINAL EXAM: Chapters 9 - 12 (5:00 to 7:00 PM in Classroom)	