

EIN4360C Facilities and Work Design
Fall 2016
MW 10th period and 11th period (5:10PM – 6:00PM, 6:15PM – 7:05pm)
WEIL270

Course Description: This course introduces fundamental concepts in several main areas of industrial engineering such as facility planning, material handling systems, work analysis and design. Topics such as analysis and design of work space and flow, facility location and layout, material handling systems, motion and time studies and work sampling are covered. (4 Credits.)

Course Objectives:

1. To gain an understanding and appreciation of the principles and methodologies relevant to the facilities Planning, Materials Handling and Work Design.
2. To have a feeling of what the real life projects are like by identifying a project in an industrial or other business setting and by formulating, analyzing and solving a relevant professional problem with the help of a sponsor.
3. To learn working in teams and to gain the ability to make effective presentations.

Instructor: Carla Rodriguez, Office: WEIL378 , Email: rodrcd@shands.ufl.edu, Office Hours: by appointment.

Class Policies. Throughout the semester the following policies will be followed:

- **Exam Policy.** To assess student learning, students will be given two Term Exams (Weeks 7 and 14 of the semester). Prior to each exam an outline will be provided by the instructor that lists the topics that will be covered in the exam. The exams are scheduled in advance, please plan accordingly. Make-up tests will be given for unanticipated absences ONLY (e.g., illness with a doctor’s report, death in family, but NOT for job interviews). Exam Policy is non-negotiable.
- **Regrade Requests.** Requests for regrading of exams will be considered only with a written explanation and only within a one-week period from the time graded work is returned in class. Specifically, you need to prepare a typed up or legibly written memo explaining why you believe your work needs to be regraded, attach make it the cover sheet of the exam booklet, and return it to the instructor or the TA. Grades will be posted on the course page on Canvas. Throughout the semester, you have to ensure that your grades are entered correctly. Corrections will be considered only within a one-week period after the grades have been posted on the web.
- **Announcements and Course Materials.** You are responsible for all announcements made, additional material covered in class. You are responsible for printing the lecture notes from the class web site on Canvas. Paper copies of the lecture notes will not be distributed in class.

Grading. Your final grade for the class will be calculated based on your attendance, in-class participation, and homework assignments as follows:

Activity	Total Points	Percentage of Final Grade
Attendance	25	10%
Assignments (3)	30 each	20%
Midterm Exam	100	20%
Final Exam	100	20%
Project	100	30%

Final grade averages will be rounded off to the nearest integer, and assigned on the standard scale as follows:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
100-93	92-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-63	62-60	59-0

Course Outline. This is a tentative outline and the instructor reserves the right to make changes as she sees necessary.

Week	Date	Topic	Activity
1	8/24	Syllabus and Lecture 1: Introduction to Facilities and Work Design	
2	8/29	Lecture 2: Product, Process and Schedule Design	
	8/31	Lecture 3: Flow, Space and Activity Relationships I	
3	9/5	Labor Day <i>No Class</i>	
	9/7	Lecture 4: Flow, Space and Activity Relationships II	Project Team Members list due
4	9/12	Lecture 5: Personnel Requirements	
	9/14	Project Discussion and Lecture 6: Material Handling	Assignment 1 due
5	9/19	Project Week <i>No Class</i>	
	9/21	Project Week <i>No Class</i>	
6	9/26	Lecture 7: Layout Planning Models and Design algorithms	Project Proposal due
	9/28	Career Showcase <i>No Class</i>	
7	10/3	Lecture 8: Warehouse Operations	
	10/5	Lecture 9: Manufacturing Systems	
8	10/10	Midterm In class	
	10/12	Project Progress Presentations In class	Progress Presentation due
9	10/17	Lecture 10: Facilities Systems	
	10/19	Lecture 11: Evaluating and Selecting the Facilities Plan	
10	10/24	Lecture 12: Preparing, Presenting, Implementing, and Maintaining the Facilities Plan	
	10/26	Lecture 13: Ergonomics I	Assignment 2 due
11	10/31	Lecture 14: Ergonomics II	
	11/2	Lecture 15: Work Measurement I – Time Studies	
12	11/7	Lecture 16: Work Measurement II – Work Sampling	
	11/9	Lecture 17:	Assignment 3 due

		Environment I	
13	11/14	Lecture 18: Environment II	
	11/16	Final Exam In class	
14	11/21	Project Day <i>No Class</i>	
	11/23	Thanksgiving Holiday <i>No Class</i>	
15	11/28	Lecture 19: TBA	
	11/30	Project Final Presentations Day 1 In class	Final Project Presentation due
16	12/5	Project Final Presentations Day 2 In class	Final Project Report due

Honor Code. All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a University of Florida student and to be honest in all work submitted and exams taken in this course and all others. If you conduct any dishonest act during an exam (e.g., cheating or using any extra material that you are not allowed to use during an exam), you will get a credit of 0 on that particular exam and your final grade for the class will be reduced by a full letter grade. If you have access to any old exam/homework/quiz material that the instructor has not made explicitly available to the entire class, you will get a credit of 0 on the particular exam for which you have not disclosed the material you have to the instructor and your final grade for the class will be reduced by a full letter grade. Your conduct will also be reported to the Dean of Students, as dictated by the rules of the University, will also be taken.

Accommodation for Students with Disabilities. Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

UF Counseling Services. Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- University Counseling Center, 301 Peabody Hall, 392-1575, Personal and Career Counseling.
- SHCC mental Health, Student Health Care Center, 392-1171, Personal and Counseling.
- Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, Sexual Assault Counseling.
- Career Resource Center, Reitz Union, 392-1601, Career Development Assistance and Counseling.