COURSE DESCRIPTION

This course covers manufacturing facilities design and material handling. The course will focus on facilities design, equipment, product flow analysis, cost justification, and material handling systems. Students will be involved in case studies, economic models, and problem solving of manufacturing systems (WIU Catalog Description).

- This online course is designed to systematically present the theories, principals and practices used in facilities design and material handling.
- Readings, presentations and/or video will provide students with a fundamental understanding of the topic.
- Homework problems, case studies and interactive exercises challenge students to apply learned concepts using actual tools and techniques used by business and industry.
- Weekly discussion boards allow students’ peer access to “bounce” ideas off.

**NOTE:** This is not a self-paced class, there are specific due dates for assignments and tests. Stay current with the course schedule. If you get behind, contact the instructor immediately for assistance or possible extension of a due date (instructor’s discretion).

DEPARTMENT OUTCOMES & ASSESSMENT

By graduation, Engineering Technology students should be able to:

1. Think critically and creatively,
2. Understand the theoretical principles of the profession,
3. Understand and apply relevant technology in the solution of technical problems,
4. Organize, manage, and maintain projects,
5. Develop an appreciation for ethical and professional practices,
6. Develop and refine oral, written, and visual communication skills, and
7. Demonstrate an overall competency in the program objectives.

Assignments and exercises completed in this course helps students meet outcomes 1, 2, 3 & 4.
COURSE OBJECTIVES:

Upon completion of this course, the student will be able to:

1. Discuss the scope and objectives of plant layout and materials handling.
2. Use charts, tables, and diagrams to gather facility layout data.
3. Use appropriate models to analyze layout problems and propose solutions.
4. Discuss the equipment, material, method, and workflow concepts as they relate to manufacturing processes.
5. Select appropriate material handling equipment for manufacturing support systems utilizing both economic and capacity models.
6. Determine application of safety standards that will affect both facilities design and material handling systems.
7. Integrate material handling systems when planning/designing manufacturing facilities.
8. Create material flow and production system diagrams for evaluation and improvement.

WEB ACCESS

For optimal performance, you will need Web access via a computer that is equipped appropriately for the virtual classroom. The University’s Technology Support (UTECH) services list current recommendations for student computers and software at:

http://www.wiu.edu/university_technology/student_resources/computer_recommendations.php

Instructions on how to log into the course may be found at:

http://www.wiu.edu/distance_learning/online_learning/prospective_and_current_students/accessing2.php

If you are not able to access the public pages, or to login to your class site by the official first day of the semester, contact University Technology Support Center at support@wiu.edu. Please include your full name in the message body, and the course ID in the subject line. You can also call UTECH Support at (309) 298-2704.

CONTACTING THE INSTRUCTOR

- Use your WIU email address for all correspondence during this course.
- Email me at gd-hunter@wiu.edu
- Title the subject line

ET 346 – your last name
A. Attendance

Because this is an online course it is important that you be self-motivated and sign in to class each week. It is assumed that regular attendance, by signing in, will keep you on track.

Notify the instructor if you have questions or feel you are falling behind in the course.

Try to stay current with all reading and homework assignments. The exams follow closely the readings, homework and other activities completed in each module.

Exams are scheduled on specific dates.
The student is responsible for material covered in the book.

The instructor reserves the right to drop a student for excessive unexcused absences or for violation of academic or behavioral standards as described in the Student Handbook or Policies and Procedures Manual.

B. Exams

There will be three proctored written exams held at a testing center. Exams are worth between 30 and 50 points. Students may bring a calculator and the textbook to the exam. No computers, cell phones or written notes will be allowed in the testing center.

Each student is responsible to make arrangements with a testing facility (refer to the “How to Schedule Exams” folder in Western Online)

The general policy on missed exams is that there are no make-ups. Students are allowed multiple days and times to take each exam. It is the student’s responsibility to schedule with the appropriate proctoring agency when and where the exams are to be taken within the allotted time frame. Failure to the exam at the specified time will result in a recorded zero for that exam.

If you know ahead of time that you will not be able to schedule an exam during the allotted time slots, notify the instructor so arrangements may be made.

C. Cheating

Cheating of any type, including plagiarism will not be tolerated and will result in a zero for the assignment, exam, or the course as determined by the instructor. Please see the University website for the academic integrity policy. See the section on Academic Dishonesty and The Nature of Academic Dishonesty below

D. Grades

Homework will be graded per problem fully completed. For example; you completed 8 of 10 assigned problems. You will receive 8 points for each problem completed.

Tests are graded point-for-point. A typical test will be worth 30 –50 points. At the end of the
semester the total number of points accumulated by each student will be added. This number will then be divided into the total number of points possible to determine a percentage. This percentage will correspond to a letter grade using the following criteria:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>100 – 95</td>
</tr>
<tr>
<td>A-</td>
<td>94 - 90</td>
</tr>
<tr>
<td>B+</td>
<td>89 – 87</td>
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<tr>
<td>B</td>
<td>86 – 84</td>
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<tr>
<td>B-</td>
<td>80 - 83</td>
</tr>
<tr>
<td>C+</td>
<td>79 – 77</td>
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<tr>
<td>C</td>
<td>76 – 74</td>
</tr>
<tr>
<td>C-</td>
<td>73 – 70</td>
</tr>
<tr>
<td>D+</td>
<td>69 – 67</td>
</tr>
<tr>
<td>D</td>
<td>66 – 64</td>
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<tr>
<td>D-</td>
<td>63 - 60</td>
</tr>
<tr>
<td>F</td>
<td>59 or below</td>
</tr>
</tbody>
</table>

ACADEMIC INTEGRITY

Preamble

Western Illinois University, like all communities, functions best when its members treat one another with honesty, fairness, respect, and trust. Students have rights and responsibilities and students should realize that deception for individual gain is an offense against the members of the entire community, and it is the student's responsibility to be informed and to abide by all University regulations and policies on Academic Integrity. (http://www.wiu.edu/provost/students/) Plagiarism, cheating, and other forms of academic dishonesty constitute a serious violation of University conduct regulations. Students who engage in dishonesty in any form shall be charged with academic dishonesty.

It is a duty of faculty members to take measures to preserve and transmit the values of the academic community in the learning environment that they create for their students and in their own academic pursuits. To this end, they are expected to instill in their students a respect for integrity and a desire to behave honestly. They are also expected to take measures to discourage student academic dishonesty, to adjust grades appropriately if academic dishonesty is encountered, and, when warranted, to recommend that additional administrative sanctions be considered. Grading policies are the exclusive prerogative of the faculty; administrative sanctions are under the authority of the Director of Student Judicial Programs. This document provides policies and procedures to be followed when academic dishonesty is encountered.

Definitions of Academic Dishonesty

The following definitions and examples are not meant to be exhaustive. The University reserves the right to determine, in a given instance, what action constitutes a violation of academic integrity. (See www.wiu.edu/policies/acintegrity.php for complete descriptions of the following topics: Plagiarism, Fabrication and Falsification, Cheating, Complicity in Academic Dishonesty, Abuse of Academic Materials, Multiple Submissions

Reporting Academic Dishonesty
All members of the University community share the responsibility and authority to challenge and make known acts of apparent academic dishonesty. Any student, faculty member, or staff person who has witnessed an apparent act of student academic dishonesty, or has information that reasonably leads to the conclusion that such an act has occurred or has been attempted, has an ethical responsibility for reporting said act(s). Confronting and reporting academic dishonesty can be done in a variety of ways, and people should choose the manner most appropriate for the circumstances. Acts of apparent academic dishonesty that occur in the classroom should be reported directly to the course instructor, and/or the course instructor's Department Chair, and/or the instructor's College Dean. The Council on Admission, Graduation, and Academic Standards (CAGAS) or the Graduate Council will not accept or act upon anonymous reports, but will hold in strict confidence the identity of any person reporting a suspected instance of academic dishonesty, unless that person consents to having his/her identity revealed.

ACCESS & DISABILITIES

In accordance with University policy and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. For the instructor to provide the proper accommodation(s), you must obtain documentation of the need for an accommodation through Disability Support Services and provide it to the instructor. It is imperative that you take the initiative to bring such needs to the instructor's attention, as he/she is not legally permitted to inquire about such particular needs of students. Students who may require special assistance in emergency evacuations (i.e. fire, tornado, etc.) should contact the instructor as to the most appropriate procedures to follow in such an emergency. Contact Disability Support Services at 298-2512 for additional services.

If you have emergency medical information to share with me, if you need special arrangements in case the building must be evacuated, or if you need accommodations in this course because of a disability, please make an appointment with me as soon as possible. My office location and hours are at the top of this syllabus. If you plan to request disability accommodations, you are expected to register with the Disability Support Services (DSS) at 298-2512.

RESOLUTION OF PROBLEMS

Should a problem occur, students should speak to their instructor first. If the problem is not resolved, meet with the chair of the department. If the problem continues to be unresolved, go to the College of Business and Technology’s Dean.

Students should observe the following sequence for the resolution of problems:

    Student --- Instructor --- Chairperson --- Dean