

**LABETTE COMMUNITY COLLEGE SYLLABUS  
MASTER SYLLABUS**

**COURSE NUMBER:** INDU 210

**COURSE TITLE:** Computer Aided Drafting & Design

**SEMESTER CREDIT HOUR:** 3

**DEPARTMENT:** Workforce Education/Career Training/Personal Enrichment

**DIVISION:** Manufacturing Technology

**MASTER SYLLABUS AUTHOR:** Ryan Seme/Bruce Rea

**INSTRUCTOR:** Name:  
Email:  
Phone: (optional)

**PREREQUISITES:** INDU 131 ENGINEERING GRAPHICS

**REVISION DATE:** 12/09/2016

**TEXT & SUPPLEMENTARY MATERIALS USED IN THE COURSE (if any):**

Engineering Drawing and Design by: Jensen/Helsel, McGraw Hill, Fourth Edition, ISBN 9781418029876

**COURSE DESCRIPTION:**

This course will include the use of computer aided design software to generate complex 3-D geometry for the purpose of communicating the following; manufacturing information, detail design information, dimensioning and tolerance data, and surface finish.

This course will teach the student more advanced drafting skills. It will take the skills developed in Engineering Graphics I and further develop those skills in the art of drafting.

The student will be expected to develop acceptable skills in the art of drafting. Additionally, the following areas will be covered: geometric tolerances, auxiliary views, threads and fasteners, assembly and working drawings, the design process, and pictorial drafting techniques.

**COURSE OUTCOMES AND COMPETENCIES:**

**Students who successfully complete this course will be able to:**

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| <ol style="list-style-type: none"><li>1. Demonstrate understanding of the design process and the impact of dimensions and tolerances on design and manufacturing.</li></ol> |
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2. Demonstrate proficient use of Parametric Design software and have an understanding of specifying design intent with the industry tool.

3. Demonstrate understanding of the concept of complete system design through production of part and assembly drawings (working drawings), parts list, etc

4. Demonstrate the proper work habits including dependability, punctuality and cooperation with the instructor and other students.

5. Demonstrate an understanding of the need for and participation in continuing education and enhancement of professional knowledge.

6. Draw complex objects.

7. Utilize advanced drafting methods.

### **COURSE OUTLINE:**

1. Parametric Modeling including design concepts.
2. Modeling and Drawing Standards
3. Drawing Creation including pictorial views and working drawings
4. Dimensioning and tolerancing
5. Assembly Modeling
6. Advanced Modeling Tools
7. Design project.

### **METHODS OF EVALUATION:**

1. Care and use of equipment.
2. Comprehension of material covered.
3. Completion of work assignments.
4. Grades will be assigned based on the following:
  - a. Review questions 25%
  - b. Work assignments 50%
  - c. Tests 20%
  - d. Attendance 5%

### **ATTENDANCE REQUIREMENTS:**

Complete attendance is required in this course. If occasions arise when a student has to be absent from class, it is the student's responsibility to clear such absences with the instructor in advance of class. Excessive absences or habitual tardiness qualifies a student for dismissal from the class. Absence in excess of three hours is to be considered excessive. It is the student's responsibility to drop the class. Please contact me prior to dropping the class to see if it can be avoided.

**All students will receive a grade for the course after the last day to withdraw for the semester regardless of the number of absences.**

**Online students and hybrid students whose courses meet online during the Add/Drop period must complete the Required Attendance Assignment to certify their attendance in the class. Students who do not complete the assignment during the Add/Drop period will automatically be dropped from the course.**

**Additional Classroom Policies are available at:**

[www.labette.edu/catalog](http://www.labette.edu/catalog)

**STUDENTS WITH DISABILITIES:**

Students who need special assistance should contact the ADA Coordinator by calling the Business office at (620) 421-6700, ext.1230, or visit the Business Office on the main campus.

**SYLLABUS SUPPLEMENT:**

Additional course and student support information is located on the LCC website:

<http://www.labette.edu/syllabi/supplement.pdf>

**All communication concerning this course or college business will be sent to your LCC student e-mail address. It is your responsibility to check this account on a regular basis.**