ET 482 – Parametric Modeling
Instructor: Jeffrey Rose, MA
Phone: 309-762-3999 x62785 Email: jd-rose@wiu.edu
Office: Riverfront 141, Office Hours: as arranged

Fall 2016 Syllabus

Course Description
The application of computer aided design techniques utilizing industrial software within a minicomputer
and workstation environment. Not open to students with credit for ENGR 482. Prerequisite: ET 207. 2 hrs.
lect.; 2 hrs. lab.

Prerequisites
Prerequisite: ET 207 or permission of instructor.

Text

Class Schedule
Lecture: Tuesday, 5:00-7:30pm, QC-Riverfront Room 122

Course Objectives
The class has been designed to assist the student achieve the following objectives:
1. Explain and describe the main characteristics of parametric modeling as well as its similarities and
differences with other modeling techniques.
2. Identify application for parametric models and their relationship with Manufacturing and Process
Planning.
3. Create and analyze three dimensional parametric models and standard features.
4. Develop working drawings, exploded assemblies, ad bills of material based on parametric models.
5. Define manufacturing and assembly constraints.
6. Develop skill that will enable the learning of other parametric computer aided design systems.
7. Improve your ability to work in teams as well as life-long study habits.

Course Format
Classes will be conducted using a combination of lecture and lab activities that will supplement the text
chapters, handouts, and visual media.

Grading Policy
It is important to complete all assignments on time. Late assignments may be penalized. Once the
assignment has been returned to the class, the instructor will not accept the assignment regardless of the
excuse unless discussed beforehand.

Homework & Case Studies
Any mathematical type problems assigned must show thought process in how the answer was obtained. An
equation and answer will not be accepted. Additionally, all units must be given in all steps of the
calculation. For essay or short answer questions, your work does not need to be word-processed. However,
if the instructor cannot interpret your writing, you will be asked to either print your answer or use a word
processing program. Show clear steps with a box around your answers.
**Special Course Cost**

"Students of this course are required to pay a special course charge of $25 for each lab-related course in the Engineering Technology Department. This money is used to support the consumable items used during the course. Payment of the course cost is a required portion of the class and must be paid after the second week of the semester but prior to your final exam. If you fail to pay your course cost, you will receive a grade of "I" for the course until the lab fee is paid or the university automatically changes the grade from "I" to "F" according to the University Policy. If the grade is changed to an "F", the grade will remain an F on your permanent transcript, regardless of payment. Payments can be made to the Engineering Technology department office (Knoblauch Hall 135) any time after the beginning of the third week of classes. Also, for the convenience of the students, the instructor will announce one date that a staff member will visit the classroom to collect course charges en masse. It is recommended that students pay by check made out to "WIU". Likewise, the student should expect a receipt to serve as proof of payment. If you have questions or concerns, please direct them to the staff in Knoblauch Hall 135 or call 309/298-1091."

**Lab Activities**

There will be a series of laboratory exercises evaluated for points toward your final grade. These activities vary between individual effort and group activity. Accuracy, quality, and timely submission will be among the criteria used for evaluation. Each student is responsible for keeping the laboratory clean. This includes but is not limited to returning tools and machining supplies to their proper locations after use, cleaning chips from the machines, and sweeping the floor. Any student who does not assist in keeping the lab clean and organized will be penalized up to 25% on lab assignment grades.

**Homework & Case Studies**

Any mathematical type problems assigned must show thought process in how the answer was obtained. An equation and answer will not be accepted. Additionally, all units must be given in all steps of the calculation. For essay or short answer questions, your work does not need to be word-processed. However, if the instructor cannot interpret your writing, you will be asked to either print your answer or use a word processing program.

**Class Attendance**

You have an obligation to yourself and a responsibility to your current or future employer to take full advantage of this learning opportunity. An important part of learning is to actively and positively participate with others in class and lab activities. During lecture, open discussion of the covered material is strongly encouraged. Attendance is not mandatory (unless you are required) but will be considered in the final grade. The instructor’s grading policy is flexible. A curve may be given at the end of the semester to adjust the class, not the student’s, grade to fairly represent the learning skills demonstrate by the class as a whole.

**Tentative Grading Scales and Criteria**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>92-100%</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>90-91%</td>
<td>C-</td>
</tr>
<tr>
<td>B+</td>
<td>88-89%</td>
<td>D+</td>
</tr>
<tr>
<td>B</td>
<td>82-87%</td>
<td>D</td>
</tr>
<tr>
<td>B-</td>
<td>80-81%</td>
<td>D-</td>
</tr>
<tr>
<td>C+</td>
<td>78-79%</td>
<td>F</td>
</tr>
</tbody>
</table>

**Other**

- No cell phone, pager, or other electronic equipment is to be used during lecture or laboratory time without prior permission from the course instructor.
- The instructor can modify course as they see fit throughout the semester.
- You are responsible for cleaning up your mess. Please be courteous to the next person who would like to use the manufacturing equipment you were working on.
Safety
Safety is the first priority of this class. The use of common sense and following basic safety principles is necessary to reduce the chance of an accident. Safety glasses are required at all times in the laboratory. You must provide your own pair of ANSI-87 approved safety glasses with side shields. Students that do not follow proper safety guidelines will not be allowed to participate in laboratory exercises. This will be reflected in your final grade. If equipment is in need of repair notify the class instructor immediately.

Manufacturing equipment is dangerous if inappropriate clothing is worn. The following recommendations to clothing are provided as follows:
1. Any hair longer than shoulder length must be braided or tied up.
2. Wear all cotton materials particular around sparks or molten metal.
3. Tuck in all shirts and button all long sleeve shirts.
4. Refrain from wearing jewelry particularly necklaces.
5. Avoid wearing frayed clothing, especially jeans or pants.

You are responsible for knowing all university and laboratory policy’s.

Plagiarism
Any work performed, written, and turned in for a grade without proper and correct citation is considered plagiarism. This unethical behavior will not be tolerated by the instructor. Not only is it unprofessional and goes against the core instructional objectives of the class, the department, and the university, it is illegal and can result in failure of the class and expulsion. Forms of plagiarism, though not inclusive, are
- Submitting a homework answer directly copied, partially copied or manipulated from the assigned textbook or any other resource (Internet or another textbook)
- Submitting homework or laboratory report copied from another student.
- Including a photograph or chart without appropriate citation.

First offense will result in a warning unless it is malicious and flagrant. The second offense will result in no credit for either the homework or laboratory report submitted. The third offense will result in failure of the class and recommendation to the appropriate university college for disciplinary action. Please review your student manual concerning plagiarism.

Student Rights and Responsibilities
Information can be found at http://www.wiu.edu/provost/students.php

Academic Integrity Policy
Information can be found at http://www.wiu.edu/policies/acintegrity.php

AMERICANS WITH DISABILITIES ACT
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 the disabled student take the initiative to bring such needs to the instructor’s attention, as he/she is not legally permitted to inquire about a disability. 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 309-298-2512 for additional information.

DISCLAIMER STATEMENT
Information contained in this syllabus, other than grading, late assignment and attendance policies, may be subject to change with advance notice, as deemed appropriate by the instructor.