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## COURSE SYLLABUS

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Computer Aided Drafting & Design  
Industrial Technology Department  
Technical Education Division  
South Plains College  
Levelland Campus



**Instructor:** Terry Stucker

**Office:** TA206

**Phone:** 806.716.2349

**Email:** [tstucker@southplainscollege.edu](mailto:tstucker@southplainscollege.edu)

**Office Hrs:** T/T: 10a-12p & 1p-3p / F: 8a - 12p (by appt)

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### COURSE INFORMATION

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**COURSE NUMBER** DFTG-1345-001

**COURSE TITLE** Parametric Modeling & Design

**PREREQUISITE(S)** DFTG 1305

**LOCATION** TA 207

**TEXTBOOK** **Parametric Modeling with Autodesk Inventor 2023** - Author: Shih, Randy - Publisher: SDC Publications  
**(Provided as an E-book as part of the class on Blackboard)**

**DESCRIPTION** This is a course using parametric based design software for 3D design and drafting and rendering. Topics include basic parametric principles, model and drawing creation and rendering.

**SCOPE** The scope of Parametric Modeling and Design will be for sixteen weeks, which will include two (2) hours of lecture per week and four (4) hours of laboratory experience per week, for a total of ninety-six (96) contact hours per semester.

**COURSE OUTCOMES** Use parametric modeling techniques to create rendered assemblies, orthographic drawings, auxiliary views, animations, and details from 3-dimensional models.

**COURSE TOPICS**

- 1) Software orientation
- 2) Solid modeling concepts and construction tools
- 3) Model history tree
- 4) Parametric constraints
- 6) Parent/Child relationships – BORN technique
- 7) Part Drawings
- 8) Section and auxiliary views
- 9) 3D printing
- 10) Assembly modeling

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### GRADING

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<b>WEIGHTS</b>	Daily Assignments	<b>40%</b>	<b>SCALE</b>	<b>A</b>	90 – 100%
	Mid-Term	<b>20%</b>		<b>B</b>	80 – 89%
	Final Exam	<b>20%</b>		<b>C</b>	70 – 79%
	Attendance	<b>20%</b>		<b>D</b>	60 – 69%
				<b>F</b>	59% or below

**DAILY ASSIGNMENTS** Each practical drawing assignment will be calculated with 100 points as the highest possible grade.

Practical drawing assignments will be graded according to the following criteria:

- |                   |                                    |
|-------------------|------------------------------------|
| 1) Neatness       | 4) Dimensioning Criteria           |
| 2) Line Criteria  | 5) Choice & Location of Views      |
| 3) Model Accuracy | 6) Correctness & Accuracy of Views |

<b>REVIEW QUESTIONS</b>	Review questions may be assigned for lecture content and will be returned to student as a study guide for subsequent assessments.
<b>QUIZ/EXAM</b>	Quizzes and Exams may be given periodically for the purpose of assessment. This may include practical drawing assessments, written assessments and or project-based assessments.
<b>MID-TERM / FINAL PROJECT</b>	The mid-term and final projects will be comprehensive in nature, comprised of information from the previous lessons throughout the semester.
<b>ASSIGNMENT CORRECTIONS</b>	<p><u>All required work must be turned in on time in order for the student to benefit from the corrections</u> and to prepare for future assignments.</p> <p>Assignments with a grade below 85, unless otherwise specified, can be corrected and resubmitted for an amended grade. <u>You will have 1 additional week to complete corrections for an assignment.</u> An amended grade will have a maximum value of <b>85</b>. <u>This is a one-time correction process and does not apply to late or missing work.</u></p> <p>Any assignments that are not turned in at the specified time and date will immediately receive a grade of Zero (0) – Late work will still be graded, but with a maximum grade of 85 – this will count as the students’ correction.</p> <p>All electronic classwork must be saved to your folder on the CAD server. Any assignment not on the server at the time of grading may receive a grade of Zero (0) – improperly filed work will still be graded, after it is filed correctly, but with a maximum grade of 85 – this will count as the student’s correction.</p>

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### CLASSROOM POLICIES

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<b>DISCLAIMER</b>	The instructor reserves the right to amend any class policies or syllabus content as deemed necessary by South Plains College and will announce such changes ahead of time to the class. If a student has any questions about a change in policy, they have the right to discuss said change with the instructor.
<b>ATTENDANCE</b>	<p><b>Four absences</b>, for any reason, are allowed per semester. Tardies, defined as not being present in class within 5 five minutes of the start of class, or leaving lab 1 hour or more before it is over, will count against your attendance grade. <u>Your grade will drop one letter grade per each absence over the allowable limit.</u> Six absences could result in the student being dropped from the course.</p> <p>Whenever absences become excessive, an <b>Excessive Absence Report</b> may be sent to the Dean of Students and, if in the instructor’s opinion, minimum course objectives cannot be met due to absences, the student may be withdrawn from the course with the appropriate letter grade X, W, or F.</p>
<b>WITHDRAWAL</b>	Any student wishing to drop this class should go through the proper procedure of initiating the withdrawal by obtaining a <b>drop form</b> from the Registrar's Office. This form must be signed by the instructor.
<b>OTHER POLICIES</b>	<p>Food and drink will be allowed at a student’s workstation as long as computers are not affected in a negative way. All drinks must be covered and stored away from computer so as not to damage any component. All workstations must be thoroughly cleaned before a student leaves class.</p> <p>Music is allowed in the classroom during lab time only - as long as it is played through headphones.</p>

Phones should be muted during the lecture phase of class. Phones are permitted during lab time when used directly for research or class initiatives. If a call is necessary, please excuse yourself from the class to address the call.

Students should adhere to all other standards established in the SPC Catalog found under *Student Conduct*.

The computers within the CAD Lab have been optimally set to enhance learning for students. The configurations are set to establish a base of reference for all students, and so the instructor can optimize aid to each student. Please do not alter the configurations of any workstation or computer at any time. Lab computers are monitored remotely

### **TexBook Syllabus Statement**

This course is part of your TexBook program, which means you don't need to purchase a textbook or access code for this course. TexBook is the required content (either an eBook or online Courseware) for your course, and is provided for you via the Bibliu platform from Day 1 of class.

- **Cost of TexBook:** this required content is provided as part of a Program called 'Inclusive Access', which means that content is provided for you at the lowest price available from the publisher. The cost for this is included in your tuition.
- **How to access your digital content via Bibliu:** you can access your material via the Bibliu link inside your Blackboard Course, or directly via the Bibliu app. If you have issues with this, please contact your professor, the Bookstore Manager or Bibliu Support (see below).
- **The Bibliu platform:** you can use the Bibliu platform to enhance your learning experience, with features including: highlighting, notes and reading text aloud. For more details and support on how to use Bibliu, please visit the BibliU support pages, or contact Bibliu support via the email: support@bibliu.com
- **Opting out:** you can Opt-Out of the TexBook Program, up until the Opt-Out deadline, via the banner displayed when you open the Bibliu platform. Remember that Opt-Out deadlines vary by term, and if you choose to Opt-Out you will lose access to this low price option, and will need to purchase the content through a different method. If you opt-Out, the fee will be refunded to your account.

Useful contacts:

1. Bookstore Manager: Christian Bruno - christian.bruno@bibliu.com
2. Bookstore Text Coordinator: Trish Wells - patricia.wells@bibliu.com
3. Bibliu Support: email support@bibliu.com

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### **ACCOMMODATIONS**

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Accommodations such as the Diversity Statement, Disabilities Statement, Non-Discrimination Statement, Title IX Pregnancy Accommodations Statement and Campus Concealed Carry Statement can be found here:

<https://www.southplainscollege.edu/syllabusstatements/>