
COURSE SYLLABUS

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

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

COURSE INFORMATION

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

GRADING

WEIGHTS	Daily Assignments	40%	SCALE	A	90 – 100%
	Mid-Term	20%		B	80 – 89%
	Final Exam	20%		C	70 – 79%
	Attendance	20%		D	60 – 69%
				F	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 |

REVIEW QUESTIONS	Review questions may be assigned for lecture content and will be returned to student as a study guide for subsequent assessments.
QUIZ/EXAM	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.
MID-TERM / FINAL PROJECT	The mid-term and final projects will be comprehensive in nature, comprised of information from the previous lessons throughout the semester.
ASSIGNMENT CORRECTIONS	<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 85. <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>

CLASSROOM POLICIES

DISCLAIMER	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.
ATTENDANCE	<p>Four absences, 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 Excessive Absence Report 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>
WITHDRAWAL	Any student wishing to drop this class should go through the proper procedure of initiating the withdrawal by obtaining a drop form from the Registrar's Office. This form must be signed by the instructor.
OTHER POLICIES	<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

SPC TexBook Syllabus Statement

TexBook Program: This course is in the SPC TexBook program, so you do not need to purchase a textbook or access code for this course.

- **What is TexBook?** The required textbook/digital content for this course is available to you in Blackboard from the first day of class. The charge for the textbook/digital content is the lowest price available from the publisher and bookstore and is included in your tuition.
- **How do I access my TexBook?** Your course material is in your Blackboard course from the first day of class. Access to your course material is provided either by VitalSource or other links inside your Blackboard course. VitalSource (and many publisher's) ebook features include the ability to hear the text read aloud, highlight, take notes, create flash cards, see word definitions, build study guides, print select pages, and download 100% of the book for offline access.
- **Help with TexBook issues and support:** check with your professor or visit: <https://support.vitalsource.com/hc/en-us/requests/new> (available 24/7 via chat, email, phone, and text)
- **Opting out of TexBook:** Participating in TexBook is not mandatory, and you can choose to opt out. However, by opting out you will lose access to the course textbook/digital content and competitive pricing, and you will need to purchase the required course material on your own. If you drop the class or opt-out before the opt-out deadline, the TexBook fee will be automatically refunded to your SPC account. The opt-out deadline for Fall and Spring is the twelfth class day. The opt-out deadline for shorter terms varies between the second and third class day.

**Please consult with your professor before deciding to opt-out. If you still feel that you should purchase the course textbook/materials on your own, send an opt-out email to pwells@texasbook.com. Include your first name, last name, student ID number, and the course you are opting out of. Once you have been opted-out, you will receive a confirmation email. If you need assistance with the process, contact the SPC Bookstore:

Email: pwells@texasbook.com / Phone: 806-716-2097

Email: agamble@texasbook.com / Phone: 806-716-4610

ACCOMMODATIONS

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/>