Drafting and Design Technology
DDT 236 Advanced Solid Modeling

Instructor: Mike Hubka
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Credit hours: 3 **Contact:** 3 Hrs.

Program/Degree: Drafting and Design Technology / Associate in Applied Science Degree

Description: This course covers advanced-level concepts and applications of Solid modeling. Emphasis will be placed on advanced -level features, commands, and applications of SolidWorks software. Upon completion, students should be able to understand SolidWorks functionality and its command procedures what will allow you to create real-world parts using a variety of manufacturing techniques.

Prerequisites: DDT 233 or Permission of Instructor

Text: Inside SolidWorks 2nd Edition
David Murray
OnWord Press - Publishers

Supplies: One Zip Disk

Course Rationale: Basic skills in Computer Aided Design (CAD), is only the beginning of a continuing process of maintaining proficiency in the use of Solid modeling and remaining current new advancements in the industry. This course is designed for the student as a continuing learning process towards the use of solid modeling commands and techniques. Knowledge and understanding of these advanced Solids modeling concepts will enhance the student's CAD experience and will better prepare the student toward an entry level position. To accomplish these goals, this course provides:

Course Objectives:

1. Use SolidWorks to prepare solid models for machine parts including dimensioning, and plotting.
2. Create solid models to be used in subsequent CAD experience.
3. To develop the mind-set needed to be proficient in the solid modeling approach to design.

Week		Topic	Assignments
1	1/16	Finish Chapter 11 Review	As Assigned By Instructor
2	1/23	Chapter 17 Advanced Feature Types Dome, Shape, 3D Sketch, Advanced Fillets Using Design Tables Using Equations	As Assigned By Instructor
3	1/30	Chapter 18 - Engraved Text Creating Planes Pg. 130	As Assigned By Instructor
4	2/6	Chapter 6 - Lofted Parts, Split Lines, Parting Lines	As Assigned By Instructor
5	2/13	**Quiz 1**	As Assigned By Instructor
6	2/20	Chapter 9 – Springs and Threads Sweeps Sweep cuts Pierce Constraint	As Assigned By Instructor
7	2/27	Sheet Metal	As Assigned By Instructor
8	3/6	Chapter 10 Part Configurations	As Assigned By Instructor
9	3/13	Chapter 12 – Assemblies	As Assigned By Instructor
10	3/20	**Quiz 2**	As Assigned By Instructor
11	3/27	**Spring Break**	
12	04/03	Chapter 15 – Assembly Configurations	
13	04/10	Chapter 15 – Assembly Configurations Exploded Views	
14	04/17	Chapter 13 - Cavities, Cores, and Mold Making	
15	04/24	Final Project	
16	05/01	Final Project	
17	05/08	***Final***	

Grading Policy:

Quiz's (two @ 150 points ea.)	**300**	Pts.
Lab Projects	**300**	
Final Project	**150**	
Final Exam	**150**	
Attendance , Attitude & Participation	**100**	
Total	**1000**	

NOTE: Northwest-Shoals Community College's policy regarding academic honesty will be **strictly enforced**! As a common courtesy to the instructor, you should attend classes promptly at specified starting times. If you are going to be absent, for any reason, you should contact the instructor as soon as possible. Make-up test and assignments shall be given on an individual basis and only with a proper excuse. At no time may a student miss more than 20% of class meetings, doing so may result in a "F"

It is **"your"** responsibility to contact the instructor for make-up test and missed assignments. If you are absent for a test or assignment, because of a proper excuse, you must take the test or make up the assignment, at the next regularly scheduled class meeting. Completing laboratory assignments is an integral part of you training. All students must satisfactorily complete at least 75% of all daily lab assignments to receive a passing grade in this course**.** The exact number of assignments for the course shall depend on the abilities of the entire class as a whole, and shall be determined by the end of the semester.

AMERICANS WITH DISABILITIES ACT (ADA)

It is the policy of Northwest-Shoals Community College to comply with the Americans with Disabilities Act (ADA). Any student covered under this act needing and desiring reasonable accommodations for this class should notify the instructor during the first week of class.