

**Instructor: Mike Hubka**  
**Office: Bld. 115 Rm #106**  
**Office Hours: Posted**  
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**Credit hours:** 4      **Contact:** 4 Hrs.

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

**Description:** This course covers beginning-level concepts and applications of Solid modeling. Emphasis will be placed on beginning -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 123 or Permission of Instructor

**Text:** Inside SolidWorks 2<sup>nd</sup> Edition  
David Murray  
OnWord Press - Publishers

**Supplies:** One 100Mb or 250 Mb Zip Disk

**Course Rationale:** Basic skills in Computer Aided Drafting (CAD), is only the beginning of a continuing process of maintaining proficiency in the use of CAD 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 CAD 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 1/10	Chapter 1 & 2 Wire frame versus Solids Benefits of solid modeling The SolidWorks Interface	As Assigned By Instructor
2 1/17	Chapter 3 – Sketch Entities Sketching Lines Sketch Guidelines Zooming and panning	As Assigned By Instructor
3 1/24	Chapter 4 – Castings Determine the best profile System feedback	As Assigned By Instructor
4 1/31	<b>Quiz 1 /Lab</b>	As Assigned By Instructor
5 2/7	Chapter 5– Turned Parts Revolved parts Chamfers Sketch tools	As Assigned By Instructor
6 2/14	Chapter 6 – Molded Parts Thin walled parts Shell feature The hole wizard	As Assigned By Instructor
7 2/21	Chapter 7 – Sheet Metal Revolving an open profile Inserting bends Using the rollback bar	As Assigned By Instructor
8 2/28	<b>Quiz 2 /Lab</b>	As Assigned By Instructor
9 3/7	Sheet Metal - Lab	As Assigned By Instructor
10 3/14	Chapter 8- Patterning Features Linear Patterns Arc conditions Circular Patterns	As Assigned By Instructor

Week	Topic	Assignments
11 3/21	Labs	
12 3/28	Spring Break	
13 4/4	Chapter 12	
14 4/11	Chapter 12	
15 4/18	Inventor	
16 4/25	Review /Labs due	
17 5/2	Final	

**Grading Policy:**

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

**NOTE:** Northwest-Shoals Community College's policy regarding academic honesty and attendance 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. **If you refuse to do this, you will receive a "0" as the grade for that particular test or assignment.** Completing laboratory assignments is an integral part of you training. 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.

