

**NORTHWEST -SHOALS COMMUNITY COLLEGE**  
**Drafting and Design Technology**  
**DDT 134 Course Title: Descriptive Geometry**

**Instructor:** Alton Rice  
**Office Hours:** As Posted  
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**Credit hours:** 3 hrs **Contact:** 5 hrs **Lecture:** 2 hrs **Lab:** 3 hrs

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

**Description:** This course is designed to teach the fundamental concepts of descriptive geometry through an emphasis on logical reasoning, visualization, and practical applications. Topics include orthographic projection, points and lines in space, auxiliary views, plane development, and calculations. Using the tools of descriptive geometry, the determination of the spatial solution is simply a process of drawing the objects or situations in a series of successive auxiliary views, and/or of using other special techniques to solve vector geometry.

**Prerequisites:** DDT 112 Introductory Technical Drawing or Permission of Instructor

**Text:** **Engineering Drawing and Design – Third Edition**  
Madsen/Folkestad/Shertz/Shumaker/Stark/Turpin  
Delmar Publishers  
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**Supplies:** Standard Drafting and Design Tool Kit

**Course Objectives:**

Upon completion of this course, you will be able to:

1. Draw and develop the position of a point, line, and/or plane in three-dimensional space.
2. Determine the actual length of any line; and create true shape of a plane surface.
3. Utilize the concepts of descriptive geometry as a problem-solving technique to do the following:
  - Determine the bearings, slopes, grades, and so on, of lines;
  - Determine the distances between lines, lines and planes, and planes;
  - Determine dihedral angles.

**Assignment Schedule**

Week/ Meeting	Topic	Assignments
1	Hand out Syllabus <b>Chapter 9</b> Introduction to descriptive geometry	As Assigned By Instructor
2	<b>Chapter 9</b> The language of descriptive geometry and the basic concepts of the projection system and identifiers.	As Assigned By Instructor
3	<b>Chapter 9</b> The projection of a point in space.	As Assigned By Instructor
4	<b>Chapter 9</b> Projection of a line; finding true lengths and end views of lines.	As Assigned By Instructor
5	<b>Chapter 9</b> Projection of a line; finding true lengths and end views of lines (cont.).	As Assigned By Instructor
6	<b>Chapter 9</b> Defining a plane and an introduction to the projection of a plane in space.	As Assigned By Instructor
7	<b>Chapter 9</b> Projection of a plane in space (cont.), and finding the edge view of a plane.	As Assigned By Instructor
8	<b>Chapter 9</b> Finding the edge view and true shape of a plane.	As Assigned By Instructor
9	<b>Chapter 9</b> Finding the true shape of a plane (cont.) <b>Review for Chapter 9 Test</b>	As Assigned By Instructor
10	<b>Chapter 9 Test</b> <b>Chapter 8</b> Secondary Auxiliary Views - introduction	As Assigned By Instructor
11	<b>Chapter 8</b> Secondary Auxiliary Views – (Cont.)	As Assigned By Instructor
12	<b>Chapter 8</b> Secondary Auxiliary Views – (Cont.)	As Assigned By Instructor
13	<b>Chapter 8</b> Secondary Auxiliary Views – (Cont.)	As Assigned By Instructor
14	<b>Review for Final Exam – Chapters 8 &amp; 9</b>	
15	<b>Final Exam – Chapters 8 &amp; 9</b>	

<b><u>Grading Policy:</u></b> Write your score in each block!	<b><u>Score 1</u></b>	<b><u>Score 2</u></b>	<b><u>Score 3</u></b>	<b><u>Total Score</u></b> (Possible Score)
<b>Test – Chapter 9</b>	Chap 9 (250)			(250)
<b>Lab Assignments</b> – Assignments may be graded individually or groups of assignments may be given one grade This will be at the instructors’ discretion.				(300)
<b>Final Exam – Comprehensive - Chapters 8 &amp; 9</b>			Chap 8 & 9 (300)	(300)
<b>Attendance, Attitude, &amp; Participation (150 points)</b> Grade will be based on # of absences, daily classroom attitude, and participation in class discussions)				(150)
<b>YOUR TOTAL SCORE IS</b>	<input type="text"/>			(1000)

**GRADES WILL BE ASSIGNED AS FOLLOWS:**

- A = 900 to 1000 Points**
- B = 800 to 899**
- C = 700 to 799**
- D = 600 to 699**
- F = Less Than 600**

## **MISCELLANEOUS INFORMATION:**

- This syllabus is subject to amendment by the Instructor at his or her discretion. Students shall be notified of any such amendment.
- 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. This will establish communications with the instructor about the possibility of making up your work.
- Make-up test and assignments shall be given on an individual basis and only with a proper excuse.
- Class attendance is an important part of learning, and is required in the Drafting curriculum. **If a student is absent more than 20% of class meetings that student may receive a grade of "F" for the course.**
- 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 your training. **All students must satisfactorily complete at least 75% of all daily lab assignments/ graded activities to receive a passing grade in the 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. **If a student does not complete "75%" of the total number of assignments, the student will receive a grade of "F" for the course.**

## **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 and the Department of Student Services, during the first week of class.**