

**Course Outline**  
**Descriptive Geometry – TEC D 109**  
Olympic College – Bremerton, WA

**Week 1**

**Day1** Chapter 1 – **“Orthographic Projection” and “Descriptive Geometry”**  
Topics: Scale and Definitions

Assignment: **Problems 1 thru 5**

**Day2** Chapter 1 – **“Orthographic Projection” and “Descriptive Geometry”**

Assignment: **Problems 5 thru 10**

Extra Credit: Problem 11

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**Week 2**

**Day1** Chapter 2 – **“Points and Lines in Space”**  
Topics: Locating a Point in Space, Line, and Locating a Line in Space

Assignment: **Problems 1 & 2**

**Day2** Chapter 2 – **“Points and Lines in Space”**

Assignment: **Problems 3 thru 5**

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**Week 3**

**Day1** Chapter 3 – **“Auxiliary Views”**  
Topics: Primary and Secondary Auxiliary Views, and Fundamental Views

Assignment: **Problems 1 & 2**

**Day2** Chapter 3 – **“Auxiliary Views”**

Assignment: **Problems 3 & 5**

Extra Credit: Problem 4

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**Week 4****Day1****Chapter 4 – “Lines”**

Topics: Types of Lines, True Length of a Line, Bearing of a Line, Slope of a Line, Point View of a Line, and Locating a Line.

Assignment: **Problems 1 thru 5**

**Day2****Chapter 4 – “Lines”**

Assignment: **Problems 6 thru 10**

Extra Credit: Problem 11

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**Week 5****Day1****Chapter 5 – “Line Characteristics”**

Topics: Locate a Point on a Line, Intersecting Lines, Visibility of a Point and a Line, Visibility of Lines, Parallel Lines, Perpendicular Lines, and Shortest Distances between a Line, Point, and Skewed Lines.

Assignment: **Problems 1 thru 5**

Extra Credit: Problem 6

**Day2****Chapter 5 – “Line Characteristics”**

Assignment: **Problems 7 thru 9**

Extra Credit: Problem 12

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**Week 6**

**Day1**      Chapter 5 – “*Line Characteristics*”

Assignment:    **Problems 10 & 11**

Extra Credit:    Problems 13 & 14

**Day2**      Chapter 6 – “*Planes*”

Topics:          Formation of Planes, Plane Types, Edge View of a Plane,  
Locating a True Length Line in the Plane, Bearing (Strike) of the  
Plane, Slope (Dip) of the Plane, Dip Direction of the Plane, and  
True Shape of the Plane

Assignment:    **Problems 1 thru 3**

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**Week 7**

**Day1**      Chapter 6 – “*Planes*”

Assignment:    **Problems 4 thru 7**

**Day2**      Chapter 6 – “*Planes*”

Assignment:    **Problems 8 thru 10**

Extra Credit:    Problems 11 & 12

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**Week 8**

**Day1**      Chapter 7 – “*Plane Relationships*”

Topics:          Shortest Distance from a Point to a Plane, True Angle between  
two Planes, The angle between a line and plane, and Plane  
method for solving problems with points and lines.

Assignment:    **Problems 1 thru 3**

**Day2**      Chapter 7 – “*Plane Relationships*”

Assignment:    **Problems 4 thru 7**

**Week 9****Day1**      Chapter 7 – “*Plane Relationships*”

Assignment:    **Problems 8 thru 10**

Extra Credit:    Problems 11 thru 15

**Day2**      Chapter 8 – “*Piercing Points and Intersections of Planes*”

Topics:          Piercing points of a line and a Plane, The intersection of two planes, and Intersection of a Three-Dimensional object.

Assignment:    **Problems 1 thru 3**

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**Week 10****Day1**      Chapter 8 – “*Piercing Points and Intersections of Planes*”

Topics:          Piercing points of a line and a Plane, The intersection of two planes, and Intersection of a Three-Dimensional object.

Assignment:    **Problems 4 thru 6**

Extra Credit:    **Problems 7 thru 9**

**Day2**      Chapter 9 – “*Revolution*” (tentative)

Topics:          The Principles of Revolution, The True length of a Line, The True Shape of a Plane, The Angle between a line and plane, The Angle between two planes.

Assignment:    **No Assignments**