

## WEST VALLEY COLLEGE Course Outline

**Department:** Architecture

**Course Number and Title:** ARCH 054 - Introduction to Architectural Desktop

**Length of course in weeks:** 16

**Units:** 3

**Total Class Hours/Week:** 6

**Lecture Hours/Week:** 2

**Lab Hours/Week:** 4

**Grade Type:** Grade/Credit/No Credit

**Catalog Description:** This course is an introduction to Autodesk: Architectural Desktop - an AutoCAD based software specifically designed for use by architecture and civil engineering professionals. This course emphasizes the construction of both 2D and 3D drawings.

**Schedule Description:** This course is an introduction to Autodesk: Architectural Desktop - an AutoCAD based software. This course emphasizes the construction of both 2D and 3D drawings.

**Recommended Preparation:**  
MATH 902, Arithmetic Functions.

**Course Outcomes:** Student Learning Outcomes

**Outcome:** Students will be able to evaluate software options and choose the most efficient to complete drawings.

**Assessment:** In-class and homework drawing assignment.

**Course Objectives:** Upon completion of this course the student should be able to:

1. Use a computer to draw 2D plans, elevation, sections; and 3D perspective, and isometrics.
2. Use the computer to expedite the drafting process, and save the electronic files of all drawings.
3. Efficiently draw and analyze different arrangements for the same site.

**Assessment:** Students in this course will be graded base on the following four categories:

1. **Writing Assignments:** laboratory reports
2. **Problem Solving Demonstrations:** homework problems
3. **Skill Demonstrations:** class and exam performances
4. **Examinations:** final drawings

**Repeatability:** 1 time

**Methods of Instruction:** Lecture & Lab

**Lecture Content:**

1. Introduction to Architectural Desktop	5.00 %
2. Tools & Commands	4.00 %
3. Express Tools	5.00 %
4. Design Palette	4.00 %
5. Design Center	4.00 %
6. Design Catalog	5.00 %
7. Drawing Exterior & Interior Walls	5.00 %
8. Drawing Windows & Door	5.00 %
9. Drawing building plans	5.00 %
10. Drawing Stairs	5.00 %
11. Drawing Kitchen Cabinets & Furniture	5.00 %
12. Inserting Fixtures and Appliances	4.00 %
13. Drawing Roofs	5.00 %
14. Insert an External Reference	5.00 %
15. Inserting & Creating Blocks	5.00 %
16. Inserting Images into a Drawing	2.00 %
17. Model Space & Paper Space	5.00 %
18. Creating a Title Block	4.00 %
19. Creating a Set of Drawing Sheets	5.00 %
20. Setting up a Camera and Creating a Perspective	5.00 %
21. Perspectives	4.00 %
22. Rendering a Drawing	4.00 %

**Lab Content:**

1. Using a computer	10.00 %
2. Assignment on Tools & Commands	4.00 %
3. Assignment on Express Tools	5.00 %
4. Assignment on Design Palette	4.00 %
5. Assignment on Design Center	4.00 %
6. Assignment on Design Catalog	4.00 %
7. Assignment on Drawing Exterior & Interior Walls	5.00 %
8. Assignment on Drawing Windows & Door	4.00 %
9. Assignment on Drawing building plans	5.00 %
10. Assignment on Drawing Stairs	5.00 %
11. Assignment on Drawing Kitchen Cabinets & Furniture	5.00 %
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16. Assignment on Inserting Images into a Drawing	2.00 %
17. Assignment on Model Space & Paper Space	5.00 %
18. Assignment on Creating a Title Block	4.00 %
19. Assignment on Creating a Set of Drawing Sheets	5.00 %
20. Assignment on Setting up a Camera and Creating	4.00 %
21. Assignment on Perspectives	4.00 %
22. Assignment on Rendering a Drawing	4.00 %

**Critical Thinking:** Analyze the differences between drafting on a computer and a drafting by hand.

**College Level Required Reading, Writing, and other Outside-of-Class Assignments:**

Over a 16 week presentation of the course, three hours per week are required for each unit of credit. Two hours of independent work done out of class are required for each hour of lecture. Outside of the regular class time the students in this class will be doing the following outside of class:

- **Problem solving activity or exercise:** 2.00 additional hours
- **Practice Skills:** 2.00 additional hours

**Textbook:**

Aubin Paul F. Mastering Autodesk Architectural Desktop 2006. 4th ed. Autodesk Press, 2005. ISBN: 9781418020521