

Residential Design Using AutoCAD® 2015

Includes video instruction

Daniel John Stine CSI, CDT



Multimedia Disc

Includes Supplemental
Files and Video
Instruction

SDC
PUBLICATIONS

Better Textbooks. Lower Prices.
www.SDCpublications.com

Visit the following websites to learn more about this book:



[amazon.com](https://www.amazon.com)

[Google books](https://books.google.com)

[BARNES & NOBLE](https://www.barnesandnoble.com)

Table of Contents

| | Page |
|---|-------------|
| 1. Getting Started with AutoCAD 2015 | |
| 1-1 What is AutoCAD 2015? | 1-1 |
| 1-2 Overview of the AutoCAD 2015 User Interface | 1-3 |
| 1-3 Open, Save & Close an Existing Drawing | 1-11 |
| 1-4 Creating a New Drawing | 1-15 |
| 1-5 Using Pan & Zoom to View Your Drawings | 1-17 |
| 1-6 Using the AutoCAD Help System | 1-23 |
| 1-7 Introduction to Autodesk 360 | 1-27 |
| <i>Self-Exam & Review Questions</i> | 1-36 |
| 2. Crash Course Introduction (The Basics) | |
| 2-1 Lines and Shapes | 2-1 |
| 2-2 Object Snaps | 2-16 |
| 2-3 Modify Tools | 2-22 |
| 2-4 Annotations | 2-35 |
| 2-5 Printing | 2-39 |
| <i>Self-Exam & Review Questions</i> | 2-43 |
| 3. Drawing Architectural Objects (Draw & Modify) | |
| 3-1 Rectilinear Objects | 3-1 |
| 3-2 Objects with Curves | 3-9 |
| 3-3 Using Layers | 3-31 |
| <i>Self-Exam & Review Questions</i> | 3-41 |
| 4. Residential Project: FLOOR PLANS | |
| 4-1 Walls | 4-1 |
| 4-2 Doors | 4-21 |
| 4-3 Windows | 4-36 |
| 4-4 Annotation and Dimensions | 4-42 |
| <i>Self-Exam & Review Questions</i> | 4-53 |
| <u>Additional Tasks</u> | |
| Task 4-1 Fireplace (north) | 4-54 |
| Task 4-2 Main Stairway | 4-59 |
| Task 4-3 Secondary Stairway | 4-60 |
| Task 4-4 Porch | 4-61 |
| Task 4-5 Garage Steps | 4-62 |
| Task 4-6 Fireplace (south) | 4-62 |
| 5. Residential Project: EXTERIOR ELEVATIONS | |
| 5-1 Elevation Outlines | 5-1 |
| 5-2 Windows | 5-18 |
| 5-3 Doors | 5-29 |
| 5-4 Chimney, Railing and Siding | 5-37 |
| <i>Self-Exam & Review Questions</i> | 5-51 |
| <u>Additional Tasks</u> | |
| Task 5-1 Grade Line | 5-52 |
| Task 5-2 Draw the Other Chimney | 5-54 |
| Task 5-3 Print Content from a Website | 5-55 |
| Task 5-4 Adding Foundation Lines | 5-55 |

| | Page |
|--|----------------|
| 6. Residential Project: SECTIONS | |
| 6-1 Building Sections | 6-1 |
| 6-2 Typical Wall Section | 6-6 |
| 6-3 Adding Annotation to the Wall Section | 6-10 |
| 6-4 Stair Section | 6-14 |
| <i>Self-Exam & Review Questions</i> | 6-24 |
| <u>Additional Tasks</u> | |
| Task 6-1 Additional Building Sections | 6-25 |
| Task 6-2 Wall Section at Garage | 6-25 |
| Task 6-3 Hatch Wall Sections | 6-25 |
| Task 6-4 Stair Detail | 6-26 |
| 7. Residential Project: PLAN LAYOUT & INTERIOR ELEVATIONS | |
| 7-1 Bathroom Layout | 7-1 |
| 7-2 Bathroom Elevation | 7-8 |
| 7-3 Adding Furnishings to your Floor Plans | 7-21 |
| 7-4 Using Tool Palettes | 7-27 |
| <i>Self-Exam & Review Questions</i> | 7-38 |
| <u>Additional Tasks</u> | |
| Task 7-1 Toilet Room Plan Layouts | 7-39 |
| Task 7-2 Toilet Room Elevations | 7-39 |
| Task 7-3 Furniture Layout | 7-39 |
| 8. Residential Project: SITE PLAN | |
| 8-1 Draw Existing Survey | 8-1 |
| 8-2 Add House, Driveway and Walks | 8-10 |
| 8-3 Layout New Contours | 8-14 |
| <i>Self-Exam & Review Questions</i> | 8-21 |
| <u>Additional Tasks</u> | |
| Task 8-1 Add items to the Site Plan | 8-22 |
| Task 8-2 Draw another Grade Profile | 8-22 |
| Task 8-3 Update Grade Profile for Each Exterior Elev. | 8-22 |
| 9. Residential Project: SCHEDULES & SET UP SHEET | |
| 9-1 Room Finish Schedule | 9-1 |
| 9-2 Sheet Setup & Management (Sheet Sets) | 9-17 |
| 9-3 Sheet Index | 9-46 |
| <i>Self-Exam & Review Questions</i> | 9-53 |
| <u>Additional Tasks</u> | |
| Task 9-1 Create a Door Schedule | 9-54 |
| Task 9-2 Place all your Views on Sheets | 9-54 |
| Task 9-3 Place Callout Blocks to Reference your Drawings | 9-54 |
| Task 9-4 Add Additional Raster Images to your Drawings | 9-54 |
| 10. Residential Project: LINEWEIGHTS & PLOTTING | |
| 10-1 Lineweights | 10-1 |
| 10-2 Plotting: Digital Set | 10-12 |
| 10-3 Plotting: Hardcopy Set | 10-26 |
| <i>Self-Exam & Review Questions</i> | 10-36 |
| <u>Additional Tasks</u> | |
| Task 10-1 Apply Lineweights to all your Drawings | 10-37 |
| Task 10-2 Plot all your Drawings Full Size | 10-37 |
| Task 10-3 Email a DWF File | 10-37 |
| Index | Index-1 |

DVD Content

11. INTRODUCTION TO COMPUTERS- 50 pages

- 11-1 Computer Basics: Terms and Functions
 - 11-2 Overview of the Windows User Interface
 - 11-3 File Management Introduction
- Self-Exam & Review Questions*

12. INTRODUCTION: MUST KNOW COMMANDS- 88 pages

- 12-1 Drafting and Display Tools
 - 12-2 Draw Commands
 - 12-3 Modify – Part 1
 - 12-4 Modify – Part 2
 - 12-5 Annotation and Layers
 - 12-6 Plotting
- Self-Exam & Review Questions*

Appendix A – Engineering Graphics

- A-1 Introduction
- A-2 Engineering Graphics
- A-3 Orthographic Projection

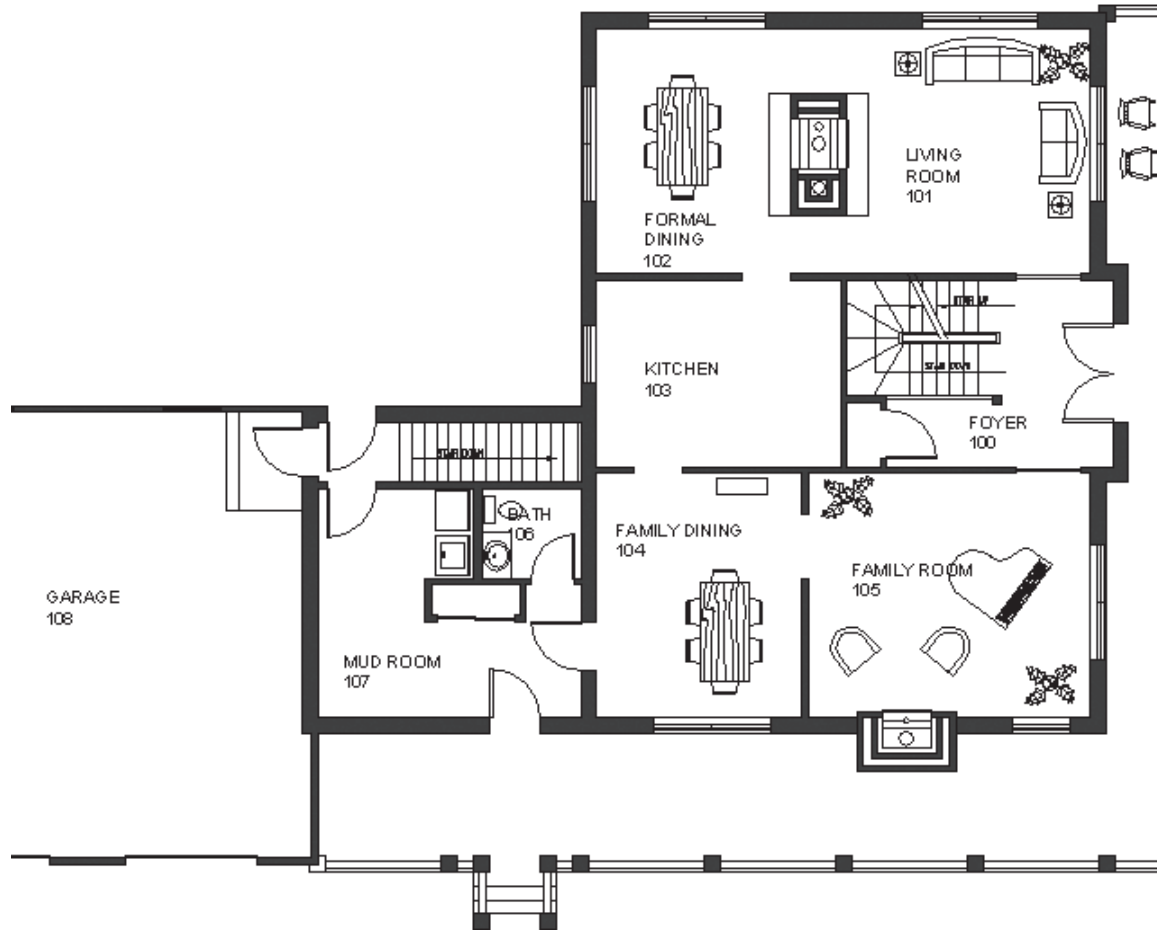
Appendix B – ROOF STUDY WORKBOOK – DRAFT EDITION - 89 pages

Appendix C – Sketching Exercises

- C-1 Introduction
- C-2 Freehand sketching from photos
- C-3 Surveying and Sketching Objects
- C-4 Sketching Floor Plans
- C-5 Sketching Elevations – two point perspective
- C-6 Sketching Elevations – one point perspective
- C-7 Sketching Plans – one point perspective

Videos

1. User Interface
2. Getting Started
3. Draw Tools
4. Modify Tools
5. Annotation
6. Floor Plans
7. Exterior Elevations
8. Sections
9. Interior Design
10. Plotting



Floor plan created in Chapter 4, utilizing blocks, hatching, layers, dimensions and text.



Exterior Elevation created in Chapter 5, utilizing blocks, hatching, lineweights and line types.