



# Experiential Learning Portfolio for 10614172 Architectural Drafting and Design 1

## Student Contact Information:

Name: \_\_\_\_\_ Student ID#: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

*It is **required** that you speak with the Academic Dean or instructor who teaches this course prior to completing a portfolio.*

*Before attempting to complete this portfolio, the following prerequisites and/or corequisites must be met: **COREQUISITES: 10614170 Architectural Materials and Methods1 and 10614176 Architectural Technology 1***

## Directions

Consider your prior work, military, volunteer, education, training and/or other life experiences as they relate to each competency and its learning objectives. Courses with competencies that include speeches, oral presentations, or skill demonstrations may require scheduling face-to-face sessions. You can complete all of your work within this document using the same font, following the template format.

1. Complete the Student Contact Information at the top of this page.
2. Write an Introduction to the portfolio. Briefly introduce yourself to the reviewer summarizing your experiences related to this course and your future goals.
3. Complete each "Describe your learning and experience with this competency" section in the space below each competency and its criteria and learning objectives. Focus on the following:
  - What did you learn?
  - How did you learn through your experience?
  - How has that learning impacted your work and/or life?
4. Compile all required and any suggested artifacts (documents and other products that demonstrate learning).
  - Label artifacts as noted in the competency
  - Scan paper artifacts
  - Provide links to video artifacts
  - Attach all artifacts to the end of the portfolio
5. Write a conclusion for your portfolio. Briefly summarize how you have met the competencies.
6. Proofread. Overall appearance, organization, spelling, and grammar will be considered in the review of the portfolio.
7. Complete the Learning Source Table. Provide additional information on the business and industry, military, and/or volunteer experiences, training, and/or education or other prior learning you mentioned in your narrative for each competency on the Learning Source Table at the end of the portfolio. Complete this table as completely and accurately as possible.

The portfolio review process will begin when your completed portfolio and Credit for Prior Learning Form are submitted and nonrefundable processing fees are paid to your local Credit for Prior Learning contact. Contact Student Services for additional information.

Your portfolio will usually be evaluated within two weeks during the academic year; summer months may be an exception. You will receive an e-mail notification regarding the outcome of the portfolio review from the Credit for Prior Learning contact. NOTE: Submission of a portfolio does not guarantee that credit will be awarded.

You have 6 weeks to appeal any academic decision. See your student handbook for the complete process to appeal.

**To receive credit for this course, you must receive “Met” on 7 of the 8 competencies.**

### **10614172 Architectural Drafting and Design 1, 4 Associate Degree Credits**

**Course Description:** This course introduces graphic representation in construction. It covers the fundamentals of drafting including line work, lettering, measuring, sketching, projections, and pictorial drawings. Students will use the aforementioned fundamentals to complete a set of drawings for a residence. COREQUISITES: 10614170 Architectural Materials and Methods1 and 10614176 Architectural Technology 1

If you receive credit for prior learning for this portfolio, you will also receive a “Met” score for the following **Technical Skills Attainment Program Outcomes** that are assessed in this specific course:

**Introduction: Briefly introduce yourself to the reviewer summarizing your experiences related to this course and your future goals.**

**Competency 1: Review the role of the architectural drafter and their equipment and methods**

Criteria: Performance will be satisfactory when:

- you explain the role of the drafter
- you discuss the basic concepts of CAD
- you describe the educational requirements for the drafter
- you explain both traditional and nontraditional employment opportunities
- you explain the role of the architect
- you explain the role of the client
- you differentiate between the role of the architect and the drafter in the architectural office setting
- you discuss the role of the architect in building design
- you explain requirements of architecture licensure in Wisconsin
- you contrast Wisconsin's architecture licensure requirements with surrounding states
- you distinguish between the requirements of licensure for commercial and residential buildings

Learning Objectives:

- a. Investigate the role of the architectural drafter
- b. Explore career opportunities and options for architectural drafters
- c. Distinguish the architect from the drafter in requirements for licensure and building design

**Required Artifacts:** Provide an electronic document of your job description and a recent performance review

**Suggested Artifacts:** A description of the structure of the firm you work with a focus of positions (principals, senior architects, project managers, drafters, etc)

Please explain the job/project work flow at the firm you work for

**Describe your learning and experience with this competency:**

**Met/ Not Met Evaluator Feedback:**

**Competency 2: Apply scaling methods**

Criteria: Performance will be satisfactory when:

- learner measures lines in different scales
- learner aligns string of dimensions
- learner places dimension appropriately
- learner explains the different types of dimension styles
- learner uses proper type of dimension

Learning Objectives:

- a. Read a scale
- b. Measure objects in a given scale
- c. Describe the components of a dimension
- d. Apply the components of a dimension

**Required Artifacts:** Provide at least 3 photos of measuring dimensions on a set of construction documents.

**Suggested Artifacts:** None

**Describe your learning and experience with this competency:**

**Met/ Not Met Evaluator Feedback:**

**Competency 3: Interpret construction documents**

Criteria: Performance will be satisfactory when:

- identify annotation
- identify symbols
- identify line weights, types, and layers

Learning Objectives:

- a. Identify symbols
- b. Identify line types
- c. Identify the AIA numbering standards

**Required Artifacts:** A pdf of a construction document set.

**Suggested Artifacts:** None

Provide an explanation of the notations used on the plans and details. In particular, door and window tags, sections markers, detail markers, and elevation tags

**Describe your learning and experience with this competency:**

**Met/ Not Met Evaluator Feedback:**

**Competency 4: Investigate architectural drawing and projection systems**

Criteria: Performance will be satisfactory when:

- you define multiview drawings
- you demonstrate orthographic projection
- you draw three-dimensional multiview drawings of objects utilizing orthographic projection
- you explain use of hidden lines in orthographic projection
- you demonstrate orthographic projection of increasing difficulty
- you distinguish between paraline projection drawings and oblique projection drawings
- you demonstrate paraline drawing
- you demonstrate paraline projection drawing
- you demonstrate one, two and three-point perspective drawing and equal subdivision of planes
- you demonstrate two-point perspective drawing utilizing a perspective grid

Learning Objectives:

- a. Demonstrate the orthographic projection method of drawing multiview drawings of three-dimensional objects
- b. Demonstrate drawing three-dimensional representations of objects using one-, two- and three-point perspective projection drawing techniques
- c. Demonstrate drawing three-dimensional representations of objects using paraline drawing
- d. Demonstrate drawing three-dimensional representations of objects using a two-point perspective projection grid

**Required Artifacts:** Provide a hand sketch of a one and two point building or interior room.

**Suggested Artifacts:** None

**Describe your learning and experience with this competency:**

**Met/ Not Met Evaluator Feedback:**

**Competency 5: Convert orthographic to isometric drawings and vice versa**

Criteria: Performance will be satisfactory when:

- you define multiview drawings
- you demonstrate orthographic projection
- you draw three-dimensional multiview drawings of objects utilizing orthographic projection
- you explain use of hidden lines in orthographic projection
- you demonstrate orthographic projection of increasing difficulty
- you distinguish between paraline projection drawings and oblique projection drawings
- you demonstrate paraline drawing
- you demonstrate paraline projection drawing
- you demonstrate one, two and three-point perspective drawing and equal subdivision of planes
- you demonstrate two-point perspective drawing utilizing a perspective grid

Learning Objectives:

- a. Demonstrate the orthographic projection method of drawing multiview drawings of three-dimensional objects
- b. Demonstrate drawing three-dimensional representations of objects using one-, two- and three-point perspective projection drawing techniques
- c. Demonstrate drawing three-dimensional representations of objects using paraline drawing
- d. Demonstrate drawing three-dimensional representations of objects using a two-point perspective projection grid

**Required Artifacts:** Provide hand sketches of orthographic and isometric drawings

**Suggested Artifacts: None**

**Describe your learning and experience with this competency:**

**Met/ Not Met Evaluator Feedback:**

**Competency 6: Design a bathroom**

Criteria: Performance will be satisfactory when:

- sketch includes standard separation of bathroom fixtures
- sketch includes common dimensions of millwork
- sketch includes common space requirements between objects
- sketch applies correct dimension and scale
- sketch includes standard wall component dimensions

Learning Objectives:

- a. Identify common standards for residential bathroom spacing
- b. Identify common standards for residential bathroom fixtures
- c. Explain common standards for residential bathroom millwork

**Required Artifacts:** Scaled Hand sketch or pdf of cad drawing of a bathroom design.

Provide floor plan and interior elevation drawing.

**Suggested Artifacts: None**

**Describe your learning and experience with this competency:**

**Met/ Not Met Evaluator Feedback:**



**Competency 7: Design a kitchen**

Criteria: Performance will be satisfactory when:

- sketch includes standard separation of kitchen fixtures and appliances
- sketch includes standard millwork dimensions
- sketch includes standard space requirements between objects
- sketch applies correct dimension and scale
- sketch includes standard wall component dimensions
- sketch includes elevations of kitchen space
- sketch includes appropriate architectural symbols and dimensions

Learning Objectives:

- a. Apply common standards for residential kitchen spacing
- b. Apply common standards for residential kitchen fixtures
- c. Apply common standards for residential kitchen millwork
- d. Draft elevations

**Required Artifacts:** Scaled Hand sketch or pdf of a cad drawing of a kitchen design. Provide floor plan and interior elevation drawings.

**Suggested Artifacts:** None

**Describe your learning and experience with this competency:**

**Met/ Not Met Evaluator Feedback:**

**Competency 8: Produce a set of residential drawings**

Criteria: Performance will be satisfactory when:

- document set includes CAD annotation methods and conventions
- document set includes appropriate line types, uses and weights
- document set includes floor plans
- document set includes exterior elevations
- document set includes a building section
- document set includes a wall section
- document set includes wall section details
- document set includes window and door schedules

Learning Objectives:

- a. Draft building foundation and footings
- b. Draft interior partitions
- c. Draft main floor exterior and interior partitions
- d. Apply layer standards in building components
- e. Draft roof plan
- f. Draft building section
- g. Draft exterior elevations

**Required Artifacts:** Pdf of a construction document set and all related DWG file of the same residential project

**Suggested Artifacts:** None

**Describe your learning and experience with this competency:**

**Met/ Not Met Evaluator Feedback:**

