



Experiential Learning Portfolio for 10614173 Architectural Drafting and Design 2

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: **PREREQUISITE: 10614172 Architectural Drafting and Design 1 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 4 of the 4 competencies.

10614173 Architectural Drafting and Design 2, 4 Associate Degree Credits

Course Description: This course introduces the student to the design principles needed for wood frame structures and incorporates the many aspects of building aesthetics and working drawings. The final assignment is to plan a set of drawings for a wood frame commercial building. PREREQUISITE: 10614172 Architectural Drafting and Design 1 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: Utilize the Wisconsin Commercial Building Code and those chapters pertaining to wood frame design and construction

Criteria: Performance will be satisfactory when:

- you describe the purpose and scope of the Wisconsin Commercial Building Code
- you explain the primary intent of building codes
- you describe the term “standard of care” for a building design professional
- you distinguish performance vs. prescriptive codes
- you explain Wisconsin’s Commercial Building Code requirements for the IBC Chapter 1
- you describe the use of IBC Chapter 2
- you identify major occupancy groups of the IBC Chapter 3
- you identify specific building uses with the appropriate occupancy group
- you identify special use and occupancies as outlined in IBC Chapter 4
- you identify uses and occupancies per IBC Chapter 3
- you compare special uses and occupancies to requirements of IBC Chapter 3
- you describe special requirements of specific special uses and occupancies
- you compare allowable building heights and areas based on use and construction type classifications
- you compare construction types per IBC Chapter 6
- you explain passive fire-resistance methods and assembly ratings
- you identify fire separations
- you describe building parapets
- you distinguish fire walls, fire barriers fire partition and smoke barriers
- you differentiate active fire-protective building systems, especially fire sprinkler systems
- you compare interrelationship of active and passive fire-resistant building protection systems
- you identify requirements for when fire sprinkler systems are required in buildings
- you identify height and area modification allowances when providing fire sprinkler systems in buildings
- you determine height and area modification allowances for hypothetical building problems
- you explain general egress requirements, including number required and distribution requirements
- you distinguish exit access, exit and exit discharge
- you explain scope requirements of IBC Chapter 11 - Accessibility
- you distinguish technical requirements of ICC A117.1 – Accessible and Usable Buildings and Facilities
- you describe the requirements of an accessible route for a building or facility
- you explain scope requirements of IBC Chapter 29 – Plumbing Facilities

Competency 1: Utilize the Wisconsin Commercial Building Code and those chapters pertaining to wood frame design and construction

Learning Objectives:

- a. Review the purpose, scope and intent of the Wisconsin Commercial Building Code
- b. Examine the Use and Occupancy classifications of the IBC
- c. Examine Special Use and Occupancy classifications of the IBC
- d. Examine height and area limitations based on building use and construction type
- e. Examine passive fire-resistance construction requirements for buildings
- f. Examine active fire-protection systems and automatic fire sprinkler systems
- g. Explore the requirements and components of means of egress systems in buildings
- h. Explore the scope and requirements for building and facility accessibility by persons with physical disabilities
- i. Explore the scope and requirements for minimum plumbing facilities in commercial buildings

Required Artifacts: Pdf of construction or schematic drawings showing a code review including the following. (Required exit distances, Fire walls barriers and partitions, and building capacities and size calculation of building)

Suggested Artifacts: None

Describe your learning and experience with this competency:

Met/ Not Met Evaluator Feedback:

Competency 2: Develop a methodical process for building design

Criteria: Performance will be satisfactory when:

- you explain the requirements of IBC Chapters 3, 4, 5, 6 and 9
- you determine area and height requirements based on use and type of construction
- you determine fire sprinkler system requirements
- you explain the concepts of IBC Chapters 7 and 10
- you classify fire resistant construction requirements
- you explain the concepts of IBC Chapters 3, 4, 5, 6, 7, 9, 10, 11, and 29
- you determine occupancy use and construction type
- you compute height and area requirements
- you determine fire resistant construction and fire sprinkler requirements
- you identify means of egress components and accessibility
- you compute minimum plumbing fixture requirements
- you determine the relevant code requirements for exit stairs
- you factor tread and riser requirements for the given total run between floor levels
- you determine fire resistant construction requirements for the stair enclosure
- you document the relevant code requirements for accessible restroom design
- you illustrate accessible reach ranges, mounting height and wheel chair maneuverability requirements

Learning Objectives:

- a. Complete a height and area limitation analysis for a multi-family apartment building
- b. Analyze fire resistant construction requirements and means of egress components for a building
- c. Complete a code analysis for a small city public library remodel and addition
- d. Design a complete enclosed exit stair for a public library
- e. Design a complete accessible restroom for a public library building

Required Artifacts: Pdf of a building including schematic design and construction drawings

Suggested Artifacts: None

Describe your learning and experience with this competency:

(Please describe how the codes affected the design through schematic and construction drawing phase)

Met/ Not Met Evaluator Feedback:

Competency 3: Analyze architectural styles

Criteria: Performance will be satisfactory when:

- you explain the major architectural styles of the United States and their distinguishing characteristics and origins
- you distinguish major architectural styles
- you identify architects who applied and/or developed specific architectural styles
- you differentiate and identify buildings from your hometown or region which are stylistically consistent with the major architectural styles discussed in the previous learning activity
- you relate architectural stylistic characteristics of your chosen buildings to specific common American architectural styles
- you identify architects who designed the buildings you chose, or applied and/or developed similar architectural styles

Learning Objectives:

- a. Examine major architectural styles found in the United States
- b. Identify architectural styles of specific local or regional buildings

Required Artifacts: Submit a report or paper on a specific architectural style including examples and showing what architectural components define that style

Suggested Artifacts: None

Describe your learning and experience with this competency:

(Please describe why you chose this style and why the buildings are defined as that style)

Met/ Not Met Evaluator Feedback:

Competency 4: Design a wood frame commercial structure

Criteria: Performance will be satisfactory when:

- you complete a code analysis for a project
- you design the addition and remodeled spaces for a project
- you determine allowable heights and area based on occupancy and construction type
- you select appropriate construction types based on occupancy and height and area limitations
- you differentiate interrelationship of fire resistance construction with building use, construction type and allowable heights and areas
- you illustrate components of a means of egress system
- you determine requirements of exit doors, stairway, and ramps
- you differentiate requirements of handrails and guardrails
- you draw requirements of accessible parking for buildings and facilities
- you compute minimum required plumbing fixtures, fixture types and distribution by sex, for various building uses and occupant quantities
- you illustrate requirements for accessible toilet facilities in buildings
- you diagram requirements for location and distribution of plumbing facilities within buildings
- you draw building sections based on wood frame construction systems and techniques
- you draw exterior building elevations

Learning Objectives:

- a. Translate the client program into a design schematic
- b. Develop design statements into construction drawings
- c. Develop a building design for a project applying commercial building codes

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

Suggested Artifacts: None

Describe your learning and experience with this competency:

Met/ Not Met Evaluator Feedback:

