

# Experiential Learning Portfolio for 10614171 Architectural Materials and Methods 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: 10614170 Architectural Materials and Methods 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.
- 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 5 competencies.

#### 10614171 Architectural Materials and Methods 2, 3 Associate Degree Credits

**Course Description:** This course introduces the student to commercial building materials. Students draw connection details for concrete, steel, and masonry and combinations thereof. Commercial building code analysis and construction practices such as design process, bidding, and construction administration are also covered.

PREREQUISITE: 10614170 Architectural Materials and Methods 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: Investigate drafting practices**

Criteria: Performance will be satisfactory when:

- paper or video describes the company of the person interviewed
- paper or video describes the position and job responsibilities of the person interviewed
- paper or video summarizes the topics of interest discussed with the person interviewed
- paper or video describes how learner will incorporate what was learned into an action plan
- you describe the five design phases of the design process.
- you identify standard industry practices related to construction document development.
- you identify entry level tasks and responsibilities.
- you identify roles of various disciplines in the design process.
- you can describe the term fast-tracking.

Learning Objectives:

- a. Examine architectural careers
- b. Describe entry-level tasks and responsibilities
- c. Describe tasks and responsibilities of various careers
- d. Describe the 5 phases of the design process
- e. Describe various terms relating to the design process
- f. Examine sheet number systems
- g. Describe fast-tracking and its implications on the construction process

#### **Required Artifacts:**

- Provide a resume, and a description of your responsibilities within the positions held that relate to the architectural industry.
- Share images/sheet sets in various stages of the design process. Describe your role in the project(s) at each design stage.
- Schedule meeting with course instructor to cover any lingering questions. Suggested Artifacts: None

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

#### Competency 2: Research the International Building Code (IBC)

Criteria: Performance will be satisfactory when:

- you determine number of required plumbing fixtures
- you determine number of exits
- you determine distance to exit
- you calculate exit width
- you determine allowable area and height of a building per type of construction
- you determine occupant load for a building/space

## Learning Objectives:

- a. Examine code organization
- b. Examine section organization
- c. Describe the process for using code for starting a project
- d. Describe the process for using code for a plan review

## **Required Artifacts:**

- Share a project sheet set in which you applied building code requirements; discuss the requirements that were incorporated.
- Schedule meeting with course instructor to cover any lingering questions.

## Suggested Artifacts: None

Describe your learning and experience with this competency:

# Competency 3: Examine properties and uses of concrete in construction

Criteria: Performance will be satisfactory when:

- you explain properties of concrete
- you identify movement joints
- you draw/detail movement joints
- you draw/detail concrete connection details

Learning Objectives:

- a. Explain concrete properties
- b. Describe the process of concrete placing and finishing
- c. Explain concrete testing methods
- d. Identify concrete movement joints
- e. Sketch cast-in-place concrete details
- f. Sketch pre-cast concrete details

#### **Required Artifacts:**

- Provide a sketch/finished detail of cast-in-place concrete; include a short description.
- Provide a sketch/finished detail of pre-cast concrete; include a short description.
- Provide a sketch/finished detail of a concrete movement joint; include a short description.
- Provide a sketch/finished detail/image and description of finished concrete in a project that you worked on.
- Schedule meeting with course instructor to cover any lingering questions.

## Suggested Artifacts: None

Describe your learning and experience with this competency:

# Competency 4: Examine properties and uses of masonry in construction

Criteria: Performance will be satisfactory when:

- you explain modular masonry construction
- you identify movement joints
- you identify masonry bond patterns
- you draw/detail masonry connection details

Learning Objectives:

- a. Define modular masonry construction
- b. Sketch individual masonry products
- c. Explain masonry production
- d. Sketch various masonry coursing patterns
- e. Sketch masonry connections to masonry and other materials

#### **Required Artifacts:**

- Provide a sketch/finished detail of an interior masonry wall; include a short description.
- Provide a sketch/finished detail of an exterior masonry wall; include a short description.
- Provide a sheet set of a masonry project that you worked on; share if modularity was achieved in the project and any other aspects unique to masonry construction.
- Schedule meeting with course instructor to cover any lingering questions.

#### Suggested Artifacts: None

Describe your learning and experience with this competency:

# Competency 5: Examine properties and uses of metal in construction

Criteria: Performance will be satisfactory when:

- you explain steel properties
- you describe parts of weld symbols
- you identify steel products
- you draw/detail steel connection details

Learning Objectives:

- a. Sketch individual steel products
- b. Explain steel production
- c. Describe lightweight steel framing
- d. Describe parts of weld symbols
- e. Create structural steel details
- f. Create engineered steel details

#### **Required Artifacts:**

- Provide a sketch/finished detail of a steel bar joist connection; include a short description.
- Provide a sketch/finished detail of a steel beam/column connection; include a short description.
- Provide a sketch/finished detail where you incorporated a weld symbol; include a short description of the weld symbol.
- Provide a sheet set of a project that utilized metal studs; share aspects unique to steel construction.
- Provide a sheet set of an engineered steel frame project.
- Schedule portfolio review with instructor.

Suggested Artifacts: None

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

Conclusion: Summarize how you have met the competencies of the course.

# Learning Source Table

Learning Source (name of employer, training, military, volunteer organization, etc.)	Supervisor	Start-End Date	Total Hours	Related Competencies
Ex: XYZ Corporation	Bucky Badger	8/2012-9/2014	2000	#1, 2, 3, and 7