ARCH A001N: DESIGN/ BUILD 1 FOR ARCHITECTURE NONCREDIT

Item	Value
Curriculum Committee Approval Date	12/02/2020
Top Code	020100 - Architecture and Architectural Technology
Units	0 Total Units
Hours	63 Total Hours (Lecture Hours 27; Lab Hours 36)
Total Outside of Class Hours	0
Course Credit Status	Noncredit (N)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	Yes; Repeat Limit 99
Grading Policy	P/NP/SP Non-Credit (D), • Letter Non-Credit (L)

Course Description

This learn-by-doing course involves the design and construction of a transportable structure. Students will work in teams with an instructor. Projects will vary and are likely to involve off-campus assembly. NOT DEGREE APPLICABLE. Not Transferable.

Course Level Student Learning Outcome(s)

1. Students will be able to design, develop and build a small structure, safely, and at a skilled level of craft as evaluated by the instructor.
2. Students will be able to communicate their work graphically and/or verbally as evidenced in a project portfolio or media presentation to be evaluated by the instructor.

Course Objectives

- 1. Safely utilize hand and powered equipment and maintain a safe work area.
- 2. Maintain and store tools and equipment.
- 3. Demonstrate basic construction and team assembly skills.
- 4. Design and develop a basic project that is functional and complete.
- 5. Communicate the design/build process and explain the project graphically and/or verbally with printed or digital media.

Lecture Content

Tool and Workplace Safety Safety review and quiz Material storage Intro to tools, equipment Clean up procedures Project development – Basic level of complexity Design, concept Shop drawings Cost estimating/ budgeting Purchasing, reclamation of materials Student project¬ - Basic level of complexity Build Transport and installation Finish and present, photograph

Lab Content

Project to be selected by instructor and will vary each semester. Project will include the opportunity to cover the following lab content: Project Construction Skills assessment and team organization Tool safety training Worksite safety and material handling Scheduling and time management Material selection criteria Performance of materials Cost analysis and material optimization Design Construction Shop detailing and design Construction Hardware connectors Customization production Finishes Products for finishes Safe handling applications Finishing of materials project Portfolio development Process documentation (photos, video) Portfolio creation Documenting team projects Presentation of project portfolio Communication and promotion of work

Method(s) of Instruction

- Enhanced NC Lect (NC1)
- Enhanced NC Lab (NC2)
- Online Enhanced NC Lect (NC5)
- Online Enhanced NC Lab (NC6)
- Live Online Enhanced NC Lect (NC9)
- Live Online Enhanced NC Lab (NCA)

Instructional Techniques

Lecture and in-class demonstrations, individual and small group activities and instruction.

Reading Assignments

Research and presentation of project-based topic to include: Design precedents Materials processes Pertinent readings

Writing Assignments

Writing for this course only includes minor notations and short professional descriptors as evidenced in the design drawings/models. Critical thinking is reinforced in the act of developing a design for construction and in the documentation and presentation of the project.

Out-of-class Assignments

Homework to include: Research not completed in class Construction drawings File preparation for fabrication equipment

Demonstration of Critical Thinking

Instructor-graded work assignments, attendance, participation and project presentation/review.

Required Writing, Problem Solving, Skills Demonstration

Writing for this course only includes minor notations and short professional descriptors as evidenced in the design drawings/models. Critical thinking is reinforced in the act of developing a design for construction and in the documentation and presentation of the project.

Eligible Disciplines

Architecture: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Other Resources

1. Instructor handouts and reference materials as needed for project. 2. Student will be encouraged to purchase personal hand tools. 3. Textbooks may be assigned depending on project selected.