ARCH A007N: TINY HOUSE DESIGN NONCREDIT

Item	Value
Curriculum Committee Approval Date	12/07/2023
Top Code	020100 - Architecture and Architectural Technology
Units	0 Total Units
Hours	30 Total Hours (Lecture Hours 20; Lab Hours 10)
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
Open Entry/Open Exit	No
Grading Policy	P/NP/SP Non-Credit (D), • Letter Non-Credit (L)

Course Description

Tiny House Design is a 5 week seminar course that introduces design concepts, codes, budgeting, and building strategies unique to Tiny Houses. The course is packed with guest speakers, hands-on demonstrations, and information resources. Students will plan out their own project and are encouraged to bring lots of ideas and questions. A field trip to experience a tiny house build will also be scheduled. NOT DEGREE APPLICABLE. Not Transferable.

Course Level Student Learning Outcome(s)

1. Students will design and present a tiny house concept that demonstrates knowledge learned about designing tiny houses.
2. Students will demonstrate a new or enhanced professional ability to design a tiny house solution that incorporates knowledge of materials, budgeting, construction options, and building systems.

Course Objectives

- 1. Demonstrate the basic planning, codes, and design considerations needed to design a tiny house.
- 2. Understand the advantages and disadvantages of framing choices, materials, and systems that are available for tiny houses.
- 3. Calculate a preliminary budget and list of materials selected for a tiny house.
- 4. Develop and share a tiny house design concept.
- 5. Demonstrate a basic knowledge of tools and safe operation procedures for some common power tools.

Lecture Content

Background and History Intentions Design types and sizes Rolling and fixed foundation Codes and certifications City planning and zoning Design and 3D Visualization Framing Doors and windows Materials Furnishings Systems and Sustainability Insulation and weatherproofing Energy generation Electrical Plumbing, composting Insulation Heating, cooling, ventilation Budgeting and cost estimating Excel, template Rough estimating Material take offs Pricing and detailed costs Sourcing materials Guest Speaker Topics Special populations and needs Design visions Sustainability, Photovoltaics Lessons learned

Lab Content

Demonstrations Framing Power tools and safety Tour of OCC Makerspace, FrameCAD, Construction Visit a tiny house Review final project - Discuss photograph

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

Instructional methods will include: lecture, demonstrations, class discussions, video demonstrations, tour of facilities and projects on-site, and student presentations.

Reading Assignments

Review codes and reference materials Read hand outs provided

Writing Assignments

Student will summarize and collect data into a reference notebook. Students will write their design concept and intentions into a project statement.

Out-of-class Assignments

Out of class readings, assignments, and written work will total approximately 7 hours per week (or about 35 hours total). Students will design, draw, and model their project. Students will research materials, costs, and prepare cost estimate using Excel. Students will research systems and collect reference data and specifications

Demonstration of Critical Thinking

Critical thinking will be engaged in the process of designing a personal project that demonstrates considerations and decision making in regards to tiny house design.

Required Writing, Problem Solving, Skills Demonstration

Students will produce a project notebook or file folder that contains a concept statement, design research, and collected reference material

Eligible Disciplines

Architecture: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Architecture: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Construction technology: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required Wing, Charlie. Tiny House Handbook, Current ed. Hoboken, New Jersey: Wiley, 2021

Other Resources

1. California State Building Codes - free public access 2. Reference hand outs prepared by instructor