

LIQUID THRESHOLDS: *Tiny House + Integrated Garden*

Arch 497, Wednesdays 10:10 -1:10 PM, Fall 2018, 3 Credits, offered by Shadi Nazarian+ Jose Duarte



3D Printed Bloom Pavilion at UC Berkeley, Ronald Rael

Learning objectives: 1) establishing and exploring constructive, and programmatic interrelationships between various disciplines and new technologies; 2) gaining a better understanding of sustainable practices; 3) exploring possible future systems; 4) translating and developing design ideas into buildable solutions; 5) producing representational drawings, videos, and 3D printed models; 6) developing trans-disciplinary collaborative ideas and skills.



WinSun

Project: Conceptualize and sketch ideas to propose an interconnected system that includes a tiny habitat with an integrated garden to produce food. We will consider programmatic and operational elements to inform this self-sufficient and sustainable physical living environment. This multifunctional threshold shelters its inhabitants, provides food, and stores water to feed the garden.

Harnessing the achievements of new technologies, new materials, and modes of construction remains a challenge in architecture and construction technologies. Manufacturers of everyday products combine the advantages of latest technologies, quality, function and economy more easily because they are not burdened with complex cultural associations that entangle architecture and aesthetic preconceptions. But- Often necessities and requirements of unforgiving conditions and confronting the reality of new frontiers highlight the latent capabilities afforded to us by the new technologies. This seminar involves you -no matter what your discipline- at such a pivotal position.



Emerging Objects' 3D Printed Cabin

Evaluation Criteria:

1) Feasibility of proposed design, including optimization for maximum food production, proposal's simplicity and resiliency, and clarity of the sketches. 2) Innovation of proposed concept of operation for sustained food production. 3) Cost effective operation and multi- use capabilities. 4) Ability to fabricate a proof-of-concept experimental model that addresses the key operational challenges.



David Franzee_ at Taliesen West

Location: (please note change)
434 Stuckeman Family Building,
Jones Battaglia Research Studio



ETH Zurich team casts concrete bones for SkelETHon canoe

This is a seminar where a small group of students from multiple disciplines gather to engage in a transdisciplinary project to foster the symbiotic relationship between creative design, engineering, making, and living; to ponder the Nexus for sustainable practices and emerging technologies in order to secure shelter and food; and to consider the affordances of additive construction technologies and printable composite materials that require innovative interpretation of the familiar.



TEDX Design: concrete tiny house

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