Course Description

This course explores potential futures of design and construction, surveying important changes currently developing in the social, political, economic and environmental context of architecture, and critically evaluating possibilities for future design and construction responses.

Presentations by guest speakers explore 1) Frameworks to conceptualize notions of design and “the future;” 2) The rapidly changing practices of architecture and construction; 3) The history of current trends in practice, offering context to contemporary developments in architecture; 4) Contemporary, contextual changes in society.

Finally, you will be invited to speculate about the future of architectural practice, prompted by lectures, presentations by practitioners and futurists. You will engage short, group design problems and an individual essay in which you will synthesize your reflections on contemporary architectural conditions with educated, informed speculations about the future of architecture.

This course will prepare you to negotiate a landscape of architectural production with one constant: **change**. Clients expect you, as their architect, to be educated about the best practices and leading challenges.
of contemporary practice. Furthermore, as a matter of economic and social productivity, clients are actively considering how the future of their endeavors could be impacted by current trajectories of change. In response, this course aims to prepare you to enter practice from an informed position with the ability to productively speculate about the future.

Architectural practice can be categorized as two principal modes of production. In **reactive practice**, architects design in reaction to social, political, economic, technological, and ecological changes. In **proactive practice**, architects prepare for and productively speculate about the future of architecture. Upon entering practice, you should be equipped for both.

**Guest Speakers:** (list subject to change)

**Daniel Andruczyk**  
UIUC professor of nuclear, plasma and radiological engineering, speaking on the current state and future potential of fusion energy.

**Katherine Darnstadt**  

**Hilda Espinal**  
Chief Technology Officer, Cannon Design, speaking on intelligent data and architecture.

**Gerald Exline**  
Futurist architect and mentor to Lebbeus Woods, speaking on creativity and drawing future cities. (Skype)

**Osman Erman Gungor**  
UIUC PhD candidate, speaking on autonomous vehicle platoons.

**Arathi Gowda**  
Associate Director of architecture firm SOM, speaking on future housing.

**Brian Kerschner**  
Climatologist, spokesperson for the Illinois State Water Survey, speaking on how past weather information can inform us about the future.

**Amy LaViers**  
UIUC professor, director of the Robotics, Automation and Dance Lab at UIUC, speaking on robots and embodied movement.

**Cecilia Leal**  
UIUC professor of material science and engineering, speaking on materials, drug delivery and genes.

**Macy Leung**  
CEO, MSL Company developers, speaking on the current challenges to housing.

**Tom Mulhern**  
Senior Strategist, architecture firm Gensler, speaking on strategic planning...
and operational strategy.

**Pollyanna Rhee**
Architectural historian and Mellon Postdoctoral Fellow in Environmental Humanities, UIUC, speaking on human settlement.

**Nubras Samayeen**
UIUC PhD Candidate in Landscape Architecture history and theory, speaking on the future of the “cellular city.”

**Derrick Spires**
UIUC professor of English, speaking on public space, civil planning, and black speculative fiction.

**Lynne Thomas**
Head, Rare Book and Manuscript Library UIUC, Hugo award winning writer of science fiction, speaking on ways to write about and frame notions of “the future.”

**Ged Trias**
Director of Design, Larson Darby Group, speaking on 3D modeling and drawing future cities.

Learning Objectives: Trajectories of Change

You will broaden your study of six trajectories of change that animate current developments and speculations about future architecture. Prompted by presentations from guest presenters and lectures, you will learn about the contemporary conditions of practice - the conditions that you will likely confront and be expected to engage with by practitioners, clients, and consultants upon entering practice - and engage in speculation about the future of architecture under the continuity of these trajectories.

Computing & Data:
*Contemporary:* How are advances in computing changing architecture?  
*Speculation:* How might the future of architecture be impacted by advances, for instance, in processor speed or AI (artificial intelligence?)

Technological Transfer:
*Contemporary:* What are the materials, products, and manufacturing methods impacting architecture today?  
*Speculation:* What might the future hold for architecture constructed of materials and manufacturing processes currently in nascent stages of development?

Environment, Energy & Water:
*Contemporary:* What environmental changes and current trends in resource depletion complicate the design of buildings? Conversely, what opportunities present themselves to architects as responses to environmental change?  
*Speculation:* How can architects prepare for climate change, new energy production technologies such as solar, and depleting/shifting water sources?

Health & Wellness:
*Contemporary:* How is architecture currently adapting to changes in healthcare delivery?  
*Speculation:* What might be the future of architecture with advances in human lifespan and medicine?

Human Settlement:
*Contemporary:* What are the current architectural challenges and opportunities to urbanization and housing?  
*Speculation:* How might rising populations, shifting demographics and megacities influence our profession in the future?

Public Policy:
Contemporary: How does the current regulatory landscape of architecture impact practice and how is it changing?
Speculation: If the political landscape shifted radically in the future, what shapes might architecture take in response?

Learning Outcomes

Upon successful completion of this course, you will be able to:

1. Understand architecture as an integrative practice of expert knowledge, design expertise, and collaboration with consultants and stakeholders across multiple domains.

2. Productively engage your future clients’ project objectives with knowledge of best practices in architecture, and the ability to hypothesize design responses in reaction to your clients’ concerns for the future of their practices, businesses, and social concerns.

3. Enter professional architectural practice prepared for the constant of rapid change in architectural production and the social, political, economic, technological, and ecological contexts in which it operates.

Assignments

Project Zero - A reflection response: What are you curious about, concerning the future of architecture? (Could be a one page paper, a diagram, a model, a PowerPoint, a protest, an interpretive dance...etc.)
Project 01 - Ten minute group presentation exploring a trajectory of change and speculating on its future.
Project 02 - Join a team of students to speculate on future design responses, producing sketches, renderings, parti-diagrams, or study models, or other digital media as a speculated design response.
Project 03 - Essay, 5-7 pages in length. This essay is to speculate on the trajectory of architecture in 20-30 years.

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