2018
SGH / Dri-Design Scholarship

Spring 2018
Arch 411 Architectural Design Studio: Integrate
University of Nebraska-Lincoln
College of Architecture
The mission for the Architecture program is to provide the educational foundation for articulate, intellectually aware, self-realizing architecture professionals capable of performing effectively in evolving design disciplines.
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Continuation of complex problems as it relates to the integration and consideration of environmental stewardship. Emphasizing technological considerations as formal and organizational influences including technical documentation, accessibility, site design, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

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Photographs.
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The College of Architecture at the University of Nebraska-Lincoln, in partnership with SGH (A Division of SGH Redglaze Holdings Inc.) and Dri-Design, has established a student scholarship competition for the fourth-year, undergraduate, architectural design studios. The scholarship recognizes student projects exemplifying outstanding design investigation, resolution, and significance. This opportunity brings together aspiring architects and industry leaders to advance disciplinary knowledge of design, materiality, and innovation.

Following the end-of-semester review, one project from each studio is selected to compete for the SGH (A Division of SGH Redglaze Holdings Inc.)/Dri-Design Scholarship. These projects are presented to an external jury who are all established practitioners in their fields. A finalist is chosen for producing and communicating a comprehensive architectural project that is a result of design decisions at different scales. To be successful, students demonstrate a high degree of professional dedication, rigor, open-mindedness, and resourcefulness. Projects are rigorously developed and clearly communicate the breadth and depth of investigation.

We thank our sponsors SGH (A Division of SGH Redglaze Holdings Inc.), a leading distributor and installer of customized building products, and Dri-Design, a producer of advanced and sophisticated metal wall panel systems.

Spring 2018 - Architecture Design Studio Faculty

Mark Bacon, AIA, Design Director / Senior Associate, BVH Architecture, Adjunct Professor of Architecture, University of Nebraska

Jason Griffiths, Assistant Professor of Architecture, University of Nebraska

Marc Maxey, Partner, Field Day, Lecturer of Architecture, University of Nebraska

David Newton, Assistant Professor of Architecture, University of Nebraska
For nearly 70 years, SGH has supplied the highest quality products and expert installation services to commercial builders throughout the Midwest. We are a leading distributor and installer of customized architectural products for the exterior and interior of buildings. From the initial idea to the final details, we have the resources to successfully execute projects of any size.

We have an intricate knowledge of how the products work and the best way to install them, which gives us a unique expertise our customers desire. We collaborate with owners, architects and contractors to ensure that products look stunning from concept to completion.

We would like to thank Troy Burkey of SGH for helping establish this program and his continued support of the college and students.
We would like to thank Jason Zeeff of Dri-Design for his continued support of the college and students.
Chris Baribeau is the Principal Architect and co-founder of modus studio, a young and progressive design collective. Based in Fayetteville, Arkansas, modus has contributed a broad range of award-winning design projects since its inception in 2008. Along with its companion fabrication lab, the firm bridges the profession with architectural, prototyping, and fabrication work. As firm leader, Chris draws daily inspiration from his place, the threshold between the natural and man-made world of the Ozarks.
**ROBERTO DE LEON**
de Leon & Primmer Architecture Workshop (DPAW)

Roberto de Leon is a partner and co-founder of de Leon & Primmer Architecture Workshop (DPAW), an award-winning design studio focusing on public projects with a cultural, civic or not-for-profit basis. His work operates at a range of scales and environments - both urban & rural - and has been exhibited & published nationally and abroad. In 2016, Roberto was elevated to The College of Fellows of The American Institute of Architects.

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**JEN MAIGRET**
PLY+ architecture, urbanism, and design

Jen Maigret’s education and professional experience within the fields of biology and architecture inform her design expertise and approach to architecture as a component of broader environmental systems. Maigret was previously a partner in the trans-disciplinary, collaborative practice, MAde-studio LLC, and brings over 10 years of experience with projects ranging from regional green infrastructure analyses to fabricated architectural elements of public spaces to her new position as Principal at PLY + architecture, urbanism and design.
PRE-DELIBERATION
DELIBERATION
This project explores ways to evoke sacredness without religious affiliation. It is a sacred space for mourners and visitors who seek self-contemplation, a place to gather, and a place to remember those who have passed, through strategies of space, sensation, and natural phenomena. The design is a non-denominational space for visitors of diverse religious affiliations. Three main programs drive the form and division of the buildings with connecting points between each one. The reception, sanctum, and mausoleum work simultaneously to create a sequential experience using material qualities and light. One main conceptual moment happens in the sanctum where the casket of the deceased is placed on a ceremonial platform, and descends to the room below after the service. This was intended to bring importance not only to the circulation of the visitor, but also to the body. Our intent is that through strategies of atmosphere, form, scale, materiality, illumination, and shadow, we foster an environment with a quiet but strong presence that can encourage experiences of the ineffable.
“Searching for the Ineffable” excels on all levels. Its depth, rigor, clarity, development, and execution achieve a technical and comprehensive approach that extends the spiritual potential of architecture. This project should and could be built. The visual representation and quality of development would allow for an equally rich experience in reality.
The way the visitor circulates through the project became an integral part of the concept. The passage through space was intended to guide and prepare the visitor for the next space and experience. The entrance and exit have focused, directional strategies. The thresholds were designed with the idea of contrast and relief, and the sanctuary stair was a moment of transition to move in architecture or out of body experience.
The space in the sanctuary begins to unite together in this section in terms of Nostalgia, Living, and Divine. One feature that plays an integral part of the sequential process of the body is the ceremonial podium.

The podium is placed on the platform for visitors to pay their respects during the funeral. Once the funeral is over and the door closes, the platform descends to the conventional scale. The altar takes a more modest role in the thresholds, signifying a middle ground between the sacred and profane.

WEST PERSPECTIVE

The program is divided into the three conceptual spaces of the living, divine, and McHenry. The living occupies the ground level with the rooms for care and separation while the McHenry space exhibits the housing spaces above the community hall, adjoining commercial and residential. The sanctuary then takes all three levels connecting the two spaces and rising above the private chapel to symbolize the divine.

Our intent is not through strategies of atmosphere, form, scale, materiality, illumination, and shadow, we shape an environment with a sense of our strong presence that can encourage experiences of the interior.
User experience was a subject that was highly considered as the project was reviewed with the client. A flat-roofed car park was designed to keep the building cool during the warmer months of the year, while each balcony was used for socializing.

The building components were made with site cast concrete and forming the main structural and aesthetic form. The floor-to-ceiling glass windows were made with bronze tinted glass, creating a sense of openness and transparency.

Foundation:
- Site cast concrete

Structure:
- Steel framing
- Hollow square tube channel
- Intermediate channel connection Mullion assembly
- Repurposed gay brick
- Flashing with silicone sealant
- Aluminium header
- Double pane window
- Pile led zinc brief window
- Air gap
- Tie vapor barrier
- Insulation
- Site cast concrete
- Steel base framing with base isolation
- Steel frame boulder cladding

Reception:
- Skyscraper
The year is 2100. Suburbia is rapidly consuming the countryside leaving it unable to cater to the flourishing population. In order to accommodate this unprecedented growth, the invention of land is necessary. The only choice is to grow outwards by growing upwards. The only way to perpetuate sprawl is through the designing of new ground. The new ground is manufactured – it rises above us; we are longer confined to the surface on which to live.

Old ground becomes densely organized with commercial amenities for those who reside above, generating a landscape fit for society’s reliance on consumerism. Elevated surfaces create an interwoven matrix, blurring our realities of the urban condition. We live on these surfaces under the illusion of suburbia. Verticality has suspended our disbelief. From below we see a complex of serpentine surfaces; from above a serene suburban neighborhood where technology allows us to transcend the ground plane. This new spatial condition epitomizes Rem Koolhaas’s idea of the ‘Culture of Congestion,’” where independent lifestyles exist in close proximity, promoting a local culture derived from unique social intercourse. This infrastructure design generates a layered framework which embraces chaos, granting the individual the freedom to express their individuality.

This alternative urbanism is neither a dense city nor a sprawling suburb, it exists in between. It creates a suburban mimicry guided by vertical urban density. It leverages its horizontal appetite with a structural system allowing for simultaneous vertical growth. This is the successor of non-urban living; this is the future of sprawl.
Ambitious and risk-taking, this project proposes a new vision of community at a vastly different scale. It rethinks new possibilities of suburbia while undertaking a strong use of exuberant models, drawings, and level of production. The range of representations offered different ways of engaging the ideas within the project. Pleasantly terrifying.
THE FUTURE OF SPRAWL

Beard + Peterson | Board 1
The building is built around the cultures that both the Museum of walking and B-Corp companies share and foster. Community, and outreach are the main focuses of the design. At the center of the building sits an atrium clad with bent cedar that cascades upward towards the sky. There is an intended visual connection between floors from the podium level through the offices finally connecting to the apartment levels. This connection enhances the narrative of community and can be experienced as you ascend on the elevator. The Museum of Walking encompasses the building from the outside, wrapping around each program as it moves vertically. It is more than just a space for artifacts to be curated. It is a culture, an ideal meant to be explored and discovered. It celebrates the movement and community shared by the people who bring the building to life. Where the atrium pulls the project together form the inside, so does the Museum of Walking from the outside. The Museum of Walking takes the visual connections of the atrium and makes physical bridges between them while promoting healthy lifestyles and staying true to the encompassing importance of the community.
The use of layering and construction methods has potential to initiate a community catalyst for integration of program, technology, and space through the consideration of novel construction techniques.
Innovation Bundles is an innovation center for emerging fabrication technologies located on Innovation Campus. Innovation Bundles is designed to be a place of interaction between professional researchers, university faculty, students, and the community. The creation of integrated research communities converges individuals with varying levels of expertise all exploring a specialized emerging fabrication technology topic. This integrated approach helps expand innovation through social and academic encounters across user groups. Each research community is equipped with a blend of offices, classrooms, and a variety of flexible collaboration spaces offering unique interactions which help to foster knowledge creation and collaboration. These research communities are then regionally connected to the central robotics and specialized labs. The lab space, which acts as the connection between the different research communities as a space of innovation and idea creation, is on display for the public. Finally, the entire building is connected globally through a series of experiential circulation paths and ramps with program nodes promoting unexpected interactions and boosting creativity. Overall, Innovation Bundles promotes socialization, increases creativity, and fosters knowledge creation through local, regional, and global interactions.
INNOVATION BUNDLES
INNOVATION CENTER FOR EMERGING FABRICATION TECHNOLOGIES

To promote collaborative and interactive, the Innovation Bundles integrate the natural design and technology of programs to optimize organizing, enhancing, and promoting interdisciplinary boundaries. A central idea is that all research topics together in a unique, efficient fabric, is designed to facilitate understanding and collaboration through human interaction.
Innovation Bundles is commendable for its use of technological analysis and research which lent a richness to the design and thinking process. The project took on complex challenges and was able to produce compelling overlaps of spaces creating a mixing chamber of ideas.
INNOVATION BUNDLES

INNOVATION CENTER FOR EMERGING FABRICATION TECHNOLOGIES

To promote collaboration and innovation, the Innovation Bundles reorganize the traditional higher-education programmatic organization. Classrooms, faculty offices, and studio spaces are grouped into bundles based on research topic in order to promote collaboration across traditional boundaries. A central robotics lab brings all research topics together in a mixing space of ideas. All spaces are connected by one continuous ramp system, which boosts creativity through walking and increases innovation through human interaction.
1. Triple pane low-e glass daylight
2. Structural glass joint
3. Top of high glass bar secondary
4. Support
5. Protective steel grate
6. Galvanized steel chamfer lip
7. Water drain/needle gutter
8. Insulated steel cap
9. Primary structure 5/16" steel tube
10. Primary structure 3/8" steel tube
11. Structural steel pin connection
12. Curved triple pane low-e glass panel
13. Curved triple pane low-e projected panel
14. Floor assembly
15. Curved glass steel reinforced precast concrete infill panel
16. Steel vertical dude
17. Slab on grade
18. Insulated liquid pave
19. Compaction gravel
20. Refractory duct
21. Supply air duct
22. Concrete foundation wall
23. Drainage mat
24. Insulated steel cap
25. Steel collar
26. Expansion bolts
Troy Burkey from SGH presenting material and spatial properties. (photo taken by faculty)
Dri-Design is not laminated, nor a composite will never delaminate and are non-flammable.

Jason Zeeff from Dri-Design presenting logics of systematic assembly.

(photo taken by faculty)
Here so panels please.
Design Studios

Mark Bacon, Adjunct Professor of Architecture

* Rachel McCown and Danny Ortega
  Yan Chen
  Charles Dowd
  Landon Dubas
  Nathan Gradoville
  Ian Jones
  Collin Meusch
  Ryan Miller
  Jordan Morris
  Abigail Nelson
  John Round
  Manuel Ruiz
  Hannah Schafers

Jason Griffiths, Assistant Professor of Architecture

* Aaron Culliton and Yilie Wang
  Violet Bast
  Hannah Christy
  Hannah Cudaback
  Kungang Ding
  Brent Hoschar
  Audrey Lanik
  Devin McLean
  Zhen Qian
  Andrew Rose
  Shanna Satra
  Reid Shubert
  Chao Zhang

Marc Maxey, Lecturer of Architecture

* Landon Beard and Megan Peterson
  Rousol Aribi
  Elvira Batelaan
  Carly Brotherson
  Blake Brummels
  Matthew Drummond
  Joseph Holtz
  Abigail Incontro
  Rachel Jensen
  Eric Mason
  Cale Miller
  Aiden Schneider
  Ruslan White

David Newton, Assistant Professor of Architecture

* Shayla Dick and Kristina Schneider
  Alacia Bayless
  Alec Burk
  Drew Doyle
  Craig Findlay
  Robert Grebl
  Kyra Stradley
  Alexis Tapia-Vergas
  Griffin Thomas
  Alfredo Vera
  Jati Zunaibi
* Studio Finalist
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