STUDENTS LIVING CARDINAL, GOLD AND GREEN

Bringing out the innovator in every Cyclone, the Start Something Network goes above and beyond to provide students with endless academic opportunities and experiences to students in each of Iowa State University's colleges. This month, we commemorate the Start Something Program in the College of Design.

Start Something College of Design

The College of Design at lowa State University specifically focuses on interdisciplinary innovation, with emphasis on empowering students to be leaders in social and civic change. Through the dean's charge, Design for Social Change, College of Design students are offered opportunities to grow their civic mindsets, embrace engagement, and learn about human existence while giving back and providing a voice to those excluded by design. Bridging a pathway to create products and experiences that include users of any identity, background, or experience.



Image courtesy of Start Something

In fulfilling this charge, the College of Design also offers ample academic opportunities empowering students to bring out their inner innovatorselves. These include projectoriented courses, hands-on research, product development assistance and internships; aligning directly with the Start Something platform. Nurturing the mindset of being a design changemaker and making a difference.



Photo courtesy of ISU College of Design

Immersive Innovation Serving as the foundation of Start Something College of Design is a springboard for Cyclones to ignite themselves with creative thinking, known as Immersive innovation. These experiences and opportunities including design charrettes, a core design program, Wearables Design Show and option studios, allow students to amplify their imagination and express themselves in unique and original ways centered around innovation and changing the world.



Photo courtesy of ISU Student Innovation Center

Design Charrettes

The College of Design utilizes design charrettes to offer students experience in coming together as a team and achieving collective solutions to design problems. The charrettes allow for thoughtful conversations and ideas to generate within a collaborative learning and professional development environment.



Photo courtesy of ISU College of Design

As well as applying charrettes to the educational experience, the College of Design recently hosted the Dean's Charrette on the Future of Design Education, focused on a college-wide consideration of what the future of design education looks like for lowa State University. Within the charrette design, six teams of students converged with enthusiasm and creativity to discuss opportunities to ensure a more immersive experience for incoming students.

Core Design Program Iowa State University's College of Design takes honorable pride in being one of the more comprehensive U.S. design institutions, helping students immerse in the research and design process through the college's curricular structure. Incoming undergraduate students in the Core Design Program are offered interdisciplinary design interventions, intersections, and interfaces through 13 credits of design coursework before they can apply for their desired design major. Allowing students to fully embrace all areas of the different design principles before deciding which major best fits them.



Photo courtesy of ISU College of Design <u>Wearables Design Show</u> First-year students in the spring semester Design Studies 102 studio (Design Studio 1) are given the creative challenge to work collaboratively creating human-scaled wearable designs based on analyzing music, sound, and body motion. Once the students have created their looks, a performance exhibition, The Wearables Design Show, celebrates their hard, innovative work in a vibrant design show - fully showcasing the range and diversity of what defines "wearable".

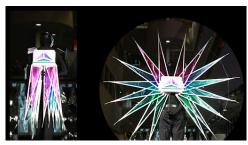


Photo courtesy of The Wearables Fashion Show The first Wearables Design Show took place in the spring of 2019, with the fall/ spring 2020 and spring 2021 shows held virtually, due to the pandemic, and shows resuming in person fall/spring 2022 and fall 2023.

Videos and pictures from past design shows, as well as information about the upcoming spring 2023 Wearables Design Show on April 20, can be found by visiting the <u>College of Design</u> webpage, <u>Wearables Design</u> Show Instagram and <u>Wearables</u> Design Show Wordpress.



Photo courtesy of The Wearables Fashion Show

Option Studios

Each spring semester, College of Design students have the opportunity to choose from a variety of advanced projectbased studios, correlated to the United Nations Sustainable **Development Goals - perfect** for innovative thinking, discovery and exploration. Each course is interdisciplinary, allowing students a unique learning style as they crosscollaborate within the design college's seven departments. Opening doorways for new explorations, interests and interfaces for and among College of Design students as they examine global challenges of design within the lens of sustainable development.

| BUSTAINABLE GOALS | | | | | |
|--------------------------------|--------------------------------------|--|--|---|---|
| 1 8venv Á : † † : † | 2 ZERO HUMBER | 3 SOCO HEALTH AND WELL SEINE | 4 CUALITY EDUCATION | 5 ERARA | 6 CLEAN WATER AND SAATLATION |
| 7 AFORDABLE AND CLEAREMENTY | 8 DECENT WORK AND ECONOMIC DROWTH | 9 NOUSTRY, INNOVATION AND POSTRUCTURE | 10 REDUKED REDUKTIONS | 11 SUSTAINABLE CITES AND COMMUNITIES | 12 RESPONSIBLE CONSIMPTION AND PRODUCTION |
| 13 ELIMATE | 14 BELOW WATER | 15 LITE LAND | 16 PEACE JUSTICE AND STRONG INSTITUTIONS | 17 FORTHEESHIPS FORTHE GOALS | SUSTAINABLE DEVELOPMENT GOALS |

Image courtesy of The United Nations

Live Green! had the opportunity to connect directly with College of Design students taking this deeper dive into critical thinking and solutions through two of the College's option studios, offered to upperclassmen in their last year at lowa State.

DSN 546 Option Studio -Advanced Color Studio

Morgan Willson is a senior majoring in interior design with a minor in entrepreneurship. When it became time for Willson to choose her option studio, she knew right away she wanted to be in Julie Irish's Advanced Color Option Studio. A course focused on exploring multiple facets of color, including theories, color schemes, historical and cultural aspects and accessibility.

Willson's intrigue with color heightened over the summer, when she had the opportunity to intern in Dallas, Texas, at an architectural firm specializing in K-12 educational design. Willson learned how extensively colors affect a student's productivity in the classroom. This ultimately encouraged her to choose an option studio that focused on advanced color design. Currently, she is working on a color rendering project, inspired by work done during her internship in Dallas.



Image courtesy of Morgan Willson

Willson's internship also allowed her to become more familiar with sustainability when her intern team started a sustainability initiative. The goal of the initiative was to encourage the choice of products with higher sustainability declarations in projects toward also leading schools to make more sustainable design decisions. Willson's biggest takeaway? When designing with human wellness in mind, sustainability often follows - when taking into account the impact of material choice. Oftentimes the products with the highest health impacts are also the ones that are not the most sustainable.

In the Advanced Color Studio course, Willson has also become more aware of many environmental impacts, especially through biophilic design - the practice of connecting people and nature within our built environment and communities. Specifically Willson noted achieving biophilic design through the use of windows or skylights to provide natural light, the use of living walls or green walls to bring in the living and growing natural life, as well as the use of water to add the presence of water. Willson gleaned through her option studio work the opportunity for the use of color to evoke the feeling and impact of biophilic design in schools (and other areas within the built environment) where it may not be feasible to have water or plants.



Image courtesy of Morgan Willson



Image courtesy of Morgan Willson

DSN 546 Option Studio -Experimental Structures: More with Less

Taught by Rob Whitehead, More with Less is designed to explore connections between structural form, materiality, and assembly, but with a main operating focus of "more with less." His option studio includes 16 architecture and industrial design students that work interdisciplinarily to create complicated and constructable experimental structures, all while using the least amount of materials possible.



Photo courtesy of Live Green!

Whitehead discussed how his studio was set up, with an atmosphere and working environment that promotes immersive learning. "Experiments are often about incremental but important improvements. This work takes creativity and a high level of technical understanding; it also takes discipline to slow down and to understand what you are looking for in experiments." Just how immersive the option studio atmosphere is was evident as Whitehead toured us through some of the projects (involving wood, metal, plaster, foam and even bubbles!) and introduced us to the innovative students overseeing them.

We sat down with the class to further discuss why they decided to immerse themselves in Whitehead's option studio.



Photo courtesy of Dakota Dehnke



Photo courtesy of Live Green!

Max Firmstone, a junior in industrial design, resonates with the opportunities offered in the studio related to doing more with less in product design - specifically the forms and the activities to find forms. He noted his interest in applying these activities to different products beyond the built environment. Emma Bontrager, a fifth-year student studying architecture, the value of having the ability to get hands-on with items that are being sketched for design as being especially significant for her. She noted as an architecture student she has the opportunity to learn a lot about the design process, adding the studio has helped her better understand what she's doing and designing, as an architect, and how to design better in the future.

Will Howell, a fifth-year student studying architecture, is very interested in net zero buildings and creating structures that use no energy. He enjoys this course because it pushes him to use the minimum amount of materials possible and think more critically.



Photo courtesy of Live Green!

His group is currently working on creating an adaptable, bio-based dome structure and gave further insight into their appreciation of the interdisciplinary aspects of the course. They collectively agreed how technology has changed our world, making hands-on, tangible building and experimentation a very beneficial and relevant opportunity that students appreciate from taking this option studio course. From an interdisciplinary aspect, being able to bring together everyone's perspectives and create a viable product is also directly applicable to real-world experiences that students will endeavor after college.

A third-year student studying industrial design, Matt Sauer, offered further insight into the environmental, economical, and social facets of sustainability he has ventured into through his design journey. Sauer noted that he is very interested in learning about free-form structures that follow nature in construction. He really likes how construction in today's world is more complex, but the materials are more economically efficient and sustainable. Sauer has most definitely become immersed in the direct hands-on experience that comes with this class. He shared how a light bulb really sparked for him when he was finally able to explore and be creative with his ideas, through the allowance provided by this option studio.



Photo courtesy of Live Green!

Another group member, Zach Gainer, a fifth-vear student studying architecture, gave further insight into his immersive journey through design. Gainer's fascination with design also emphasized the goal of net zero design. He has especially enjoyed having so many quest speakers discuss different fabrication techniques of lowering production costs to make it affordable for clients while also hitting the net zero goal further "improving the quality of life," as Gainer stated. He is grateful that this course allows him to engage with others of different expertise and together create impressive designs with such few materials.



Photo courtesy of Live Green!

Whitehead's overarching intent of his studio is all about material and human resources associated with complicated structures. When Whitehead thinks of innovation, one word comes to mind: "messy". When his students offered their thoughts in thinking of innovation, a diversity of perspectives was offered:

"Improving the quality of life - change - pushing the *limits - progression - only* as good as the innovation the past is built upon thinking outside of the box - going against the grain - testing new ideasbreaking boundaries revolution - re-imagining what is possible - creating relationships between people - the built world and the environment - creating, innovating and optimizingdesigning for the future around the corner - finding new solutions."

"Everyone thinks of innovation differently, making every path towards a solution contrast uniquely, allowing students to intertwine their creative ideas to generate a solution," Whitehead noted.

"As long as people are on a path towards a solution, we are on the right path."



Photo courtesy of Live Green!

Are You Ready To Be Immersed?

Known for its social and civic change vision and involvement, the College of Design Start Something Program provides an interdisciplinary platform for students to explore, discover, apply, collaborate and bring their ideas, opportunities and solutions to life. Learn more about, make connections to and stay updated on the College of Design Start Something Program on the program webpage, the College of Design's Instagram and Facebook social media platforms.

The adventure of bringing your entrepreneurial ideas to life can start today!

College-by-College Pitch Off

The Spring 2023 College-by-College Pitch Off Competition took place during the last few weeks of February in all seven colleges at Iowa State University. Competitors had the opportunity to deliver a 90-second pitch about an idea or business they have been working on to a panel of judges toward being named as one of the top four winners for their college and advancing to the College-by-College Pitch Off Finale, Thursday, March 2, 2-5 p.m. in the Student Innovation Center Launch Pad. For more information on the upcoming finale and a listing of winners competing, visit the ISU Pappajohn Center for Entrepreneurship Instagram or Facebook page or the Start Something website.