New Spaces for Sciences

PHASE II — THE INQUIRY INITIATIVE

The development of new science facilities at Southwestern University is moving forward in tandem with a dramatic transformation of our science curriculum. Supported by faculty from all departments in the sciences and underwritten by a $1.3 million grant from the Howard Hughes Medical Institute, Southwestern’s Inquiry Initiative is based on the most current understanding of effective science education. Broadly defined, inquiry-based learning involves student discovery and active learning rather than instructor-transmitted information. Such learning can take many forms, but the unifying factors are greater student engagement and autonomy and the staged development of students’ investigative and creative abilities.

DESIGNED FOR COLLABORATION

The Inquiry Initiative relies on flexible teaching spaces, and science center construction is carefully staged to support the current and evolving science program throughout the process. Phase I construction is fully funded and will begin in Spring 2014. The new building will provide interactive hybrid spaces—both classroom and laboratory—for introductory science courses. The teaching spaces for first-year chemistry, biology and physics will allow the faculty member to set the stage with explanations and relevant information before proceeding to active exploration, with students working in small groups under the direction and guidance of faculty. Phase I will also include shared spaces for student-faculty research to augment laboratories constructed in the 1998 wing of the building. The Phase I focus on laboratories as learning spaces will provide for seamless continuation of the Inquiry Initiative when Phase II construction moves forward.
Phase II construction will consist of the interior demolition and reconstruction of the 1950s-era science building. This historic space will be completely rebuilt to house new classrooms, seminar and meetings rooms, interactive spaces, additional research laboratories, and faculty offices. The overall design of the new science center is informed by Southwestern’s comprehensive vision for the sciences. Through careful design, we seek to:

- Connect students and faculty more closely—through research labs for shared investigation and through shared public spaces—to build scientific community. Phase II will have a welcoming, two-story, light-filled atrium where students can study outside of class and where both students and faculty can gather informally. Additional collaborative study spaces will be designated throughout the building.
- Bring STEM disciplines together for fruitful collaboration and more natural development of interdisciplinary partnerships. Phase II construction will bring kinesiology, math and computer science into the fold for the first time. Phase II will create two parallel corridors on each floor, running the length of the building and bringing all spaces—the 1998 addition, the Phase I addition and renovated Phase II construction—together into one integrated whole.
- Integrate the sciences more completely into the fabric of campus life. A new pedestrian thoroughfare will be created by closing the current road running in front of Fondren Jones Science Center. The dramatic new atrium will open directly onto this pedestrian mall, replacing today’s cluttered and confusing access with a welcoming entrance for all. The fourth floor will contain the Math and Computer Science Learning Center, where students from across campus can work on digital projects and assignments.

When complete, the new science center will include contemporary spaces that adapt themselves easily to pedagogical advances and new modes of teaching. Phase I focuses on a more seamless merger between lecture and laboratory time, and Phase II will include classrooms that support integrated pedagogy—bringing together teaching and research in multi-use areas with computer workstations, moveable and adaptable furniture, and options for multiple configurations of working groups. Phase II design also includes smaller, seminar-style classrooms clustered near faculty offices and laboratories, allowing students and faculty to work collaboratively in upper-level courses and on research projects.