A STEM SHIFT
New program aims to teach critical skills through liberal arts courses

BY MELANIE PADGETT POWERS

Freshman Paul Samms has always loved to read, usually comic books or history books. But in high school he was never challenged to analyze the meaning behind the words. He can’t say the same about the College of Liberal Arts’ new Cornerstone program. “This gave me something I was searching for in high school … where you can really bite into a book and have a profound discussion about it,” says Samms, who is considering a psychology or history major.

Cornerstone Integrated Liberal Arts is a 15-credit-hour undergraduate certificate program that launched in fall 2017. While students of all majors can pursue the certificate, the program was created specifically with STEM — science, technology, engineering, and mathematics — students in mind. “What we were finding was that the introductory liberal arts courses some students would take their freshman year would be the only liberal arts courses they would ever take their entire college career,” says Melinda Zook, director of Cornerstone and professor of history.

Students in the College of Engineering and Krannert School of Management, for example, may focus solely on their majors. They may not learn about subjects such as history or philosophy — or how such areas apply to their majors. “They’re not developing their analytic skills as much as they might,” Zook says. “They’re not learning to see the world in a broader context.”
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Zook says 21st-century employers complain that STEM graduates often lack communication and interpersonal skills and have a narrow outlook. And yet, "every engineer will tell you what they spend their time doing every day is communications," she says. Employers also look for job candidates who know how to adapt to new situations and continue to learn. "There is nothing more fundamental to the liberal arts than open-mindedness and lifelong learning," Zook says.

Cornerstone classes are taught by liberal arts professors, not graduate students. Zook recruited the professors, known as Cornerstone Fellows, because of their passion for their fields and proven teaching abilities. "I wanted our very best, our most charismatic faculty, in order to teach how do we write, how do we articulate, how do we speak in public," Zook says.

Class sizes are small, about 20 to 30 students. The students start with a two-semester first-year sequence called Transformative Texts, Critical Thinking and Communication, which fulfills their written and oral communication requirements. The first semester focuses on antiquity to modernity, the second on texts in the modern world. Each professor selects half of the texts on the syllabus from an established list Cornerstone faculty created together. They choose the other half based on their own expertise and interests. "It's great for the students, and it's equally great for the professors because you're made to get out of your comfort zone," says Angela Duran, professor of English, comparative literature, and religious studies, whose expertise is the British Renaissance and John Milton's epic poem Paradise Lost.

The Transformative Texts classes teach students how to develop their analytical, speaking and writing skills by reading and analyzing important works, then discussing them as a class. In Zook's class, readings have included Dante's Divine Comedy, Thomas More's Utopia, Shakespeare's The Tempest, and John Locke's Two Treatises of Government.

After the first year, rather than taking unconnected electives to meet their core requirements, students can choose to follow one of five Cornerstone tracks that complement their major — though they're also free to move between tracks. The program fulfills up to 60 percent of universal core requirements in a more purposeful way. The tracks are science and technology; environment and sustainability; health care and medical management and organization; and conflict resolution and justice.

Freshman Sophia Holt-Wilson, who plans to study communication, says she loved the emphasis on class discussion in her Transformative Texts class. "We get really deep into the philosophical meaning of the books," she says. Solid themes appeared again and again during the semester. She particularly liked the ongoing debates about utopia and human nature.

The Cornerstone curriculum aims to develop more well-rounded graduates from the STEM fields — as well as from any of the University's 12 colleges and schools — putting them at the top of the hiring list. "Every STEM student that does Cornerstone will get 15 hours of liberal arts. That's going to make them even more employable," Zook says.

Faculty advisers are helping to spread the word to students about what Cornerstone can offer. "It takes awhile to develop your analytical, speaking and writing skills. So mark your calendars to find out more about what Cornerstone can do to something this big," Zook says. "We're really revolutionizing the first-year experience for students."

The fifth annual Purdue Day of Giving will be held Wednesday, April 25. Your support of the Purdue Alumni Association. Funds programming and scholarship opportunities. There will be hourly challenges throughout the day, and Purdue Alumni will have its own leaderboard so that our members can monitor our progress throughout the day. You will have three options for your gift to Purdue Alumni. First, you can choose to give to the general fund. Second, you can support the Purdue Alumni Association. Stu- dent Scholarship Endowment. This endowment funds scholarships every year for Purdue students. Students who are the chil- dren of Purdue Alumni members and/or legacies are given first priority. Finally, you can elect to make a difference in your community by giving to your local alumni club scholarship account.

Alumni clubs awarded $372,040 in scholarships for the 2017–18 school year. You will be able to designate the gift to the club of your choice. So mark your calendars and determine your giving goals. More information about the challenges and the direct giving links will be available in the weeks to come. Make sure Purdue has your correct email address on file, and that you are subscribed to receive our emails. Most of the Purdue Day of Giving information is shared through email and social media. If you need to update your record, you can log in to purduealumni.org using your constitu- ent ID. Found on the back cover. You also can call 800-662-6015 or email pur- duealumni@purdue.edu for more assistance. Every gift is valuable. Let's show Purdue that our members are the best!