



Duke
UNIVERSITY

ONLINE
DUKE

Duke University is a leader in the innovative application of technology to education. This distinction is built on outstanding faculty exploring new ways to advance students' intellectual growth, supported by the university's extensive technology resources and services.

INITIATIVES AT DUKE

Duke faculty from a wide range of disciplines have demonstrated the creative ways online activities can enhance campus courses, reach a worldwide audience, enable new partnerships and promote student learning.

Online Duke supports projects such as:

Blending online and on-site activities
across campuses

Co-developing and
co-teaching courses with global partners

Online materials to supplement campus
courses and programs

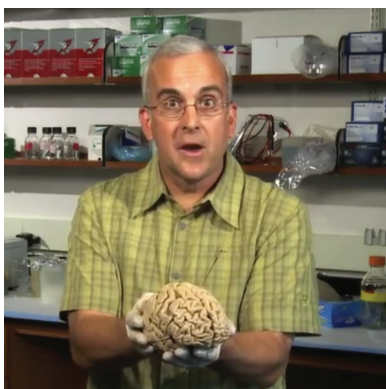
Online, synchronous courses for Duke
students away from campus

PARTICIPATE

Support is available for faculty at every step of the way: generating ideas, planning an effective project, developing content and assignments, and assessing learning outcomes. Part of Duke University Libraries, Duke's Online Education Initiatives connect faculty with a network of resources and support across the university, including the Center for Instructional Technology, the Office of Information Technology, and Duke Media Services.

Contact us at online@duke.edu

FACULTY STORIES



Leonard White (Duke Institute for Brain Sciences)

Leonard, White, Ph.D. says it's the personal stories from students taking his massive open online course on medical neuroscience that are really important. A student with ALS took the course using a computer and an eye-tracking system to learn more about the physiology of his disease. Another, a medical student in Egypt, took the course to supplement his degree coursework. "MOOCs redefine what it means for a university to have impact," he says.

On campus, White uses the videos filmed for his online course to "flip" his classroom, and encourages Duke students to enroll in the open, online version as well. Now, White is working to use the videos as an online resource for students at Duke-NUS Graduate Medical School in Singapore. He's also exploring ways content from his online course can be used to help start new medical schools in under-resourced parts of the world where faculty with specific subject-area expertise are in short supply.

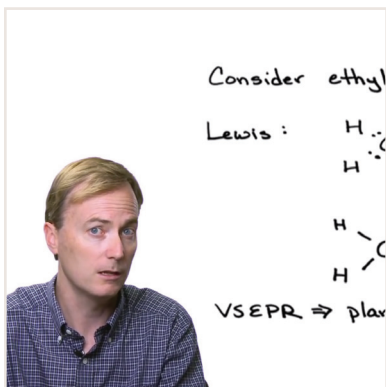


Denise Comer (Thompson Writing Program)

Denise Comer, Director of Duke's First-Year Writing Program, has long been interested in how writing can be of value across contexts. When Duke first started participating in massive online courses in 2012, it offered an opportunity to teach writing to a large and diverse group of individuals at once, and to explore two key questions: How do people in different cultures learn writing, and how do people generally learn writing online?

"It was a natural fit to do research on the course," said Comer. She received two grants from the Gates Foundation, one to explore teaching composition online and a second with Chemistry professor Dorian Canelas to examine peer-to-peer interaction on the Coursera platform.

Beyond the research data, Comer says teaching a massive group of students has given her a more expansive view of how writing works in the world. It also gave her a better sense of the challenges facing English language learners. In response, she developed an online resource to help Duke international students better understand U.S. academic writing.



Stephen Craig (Chemistry)

In 2011, Stephen Craig decided he wanted to teach Chemistry 43 without two stalwarts of the college course: the lecture and the textbook. Craig worked with other faculty in the Chemistry department to create problem sets and activities for students to work through in small teams in class. Instead of a textbook, they curated a collection of open-source educational materials, including existing websites like The Orbitron, from the University of Sheffield, videos from MIT's OpenCourseWare, and whiteboard animations produced by Craig himself.

Students review the materials before class; in class, they solve problems, sometimes brought in from his own research lab. He says this method lets him explore material with students in a deeper way than would be possible otherwise. He can observe how students work through the material and help when they get stuck. "I get to do more teaching this way," he says. Several years after implementing the new course design, Craig's work has led to discussions in the department about how to create more online Chemistry resources and share the knowledge with students around the world.

See more examples at online.duke.edu/projects