

Friday, May 8, 2015

## Professor recognized for excellence in engineering education

For her outstanding work as an engineering educator, Oakland University's Barbara Oakley recently won two awards from the **American Society for Engineering Education (ASEE)**. Dr. Oakley is this year's recipient of the Chester F. Carlson Award, which honors innovation in engineering education, and the Theo C. Pilkington Award for exemplary work in bioengineering education.

The awards are a testament to Dr. Oakley's passion for helping students understand and appreciate the field of engineering. Throughout her career, she has worked to make the subject accessible to all students, including those without an engineering background. She created a course at Oakland University called "How Things Work," which helps non-engineering students understand basic engineering concepts. The course drew praise from the National Science Foundation at the 2007 Technological Literacy of Undergraduates Workshop held at the National Academy of Engineering. Dr. Oakley has also received Oakland University's Teaching Excellence Award, the university's top teaching award for tenured faculty, and was a featured speaker at Oakland's 2014 **TEDx Conference**. She earned her Ph.D. in systems engineering from Oakland in 1998 and has distinguished herself as an exceptional educator among students and colleagues.



*Dr. Barbara Oakley spoke at Oakland University's inaugural TEDx Conference in 2014.*

Judy Ableser, director of OU's **Center for Excellence in Teaching and Learning**, calls Dr. Oakley a model for other teachers.

"She's what we'd like all faculty to model after in terms of style and approach," said Dr. Ableser. "Although her focus is in STEM, she really focuses on how students learn. She's not just great at teaching content, but understanding how to teach it for students to be successful learners."

Along with her achievements at OU, Dr. Oakley designed a Massive Open Online Course (MOOC) for the University of San Diego-Coursera, which has generated an enrollment of more than 500,000 students. The course, called "Learning How to Learn: Powerful Mental Tools to Help You Grasp Tough Subjects," introduces students to learning techniques that help them understand difficult concepts in the STEM disciplines. The course proved so effective that President Obama included it in an announcement of a handful of MOOCs to be accepted as continuing education credit for K-12 teachers in the United States. With those accolades, Dr. Oakley recently earned the honor of being named Coursera's inaugural Innovation Instructor.

Dr. Oakley's contributions to bioengineering education are also highly regarded. Her book "Career Development in Bioengineering and Biotechnology" has earned praise from nationally respected scholars. Dr. Zhi-Pei Liang, the Franklin W. Woeltge Professor of Electrical and Computer Engineering at the University of Illinois, described it as a "groundbreaking, broad-ranging overview of both traditional and nontraditional careers for bioengineers and engineers." Her latest release, **"A Mind For Numbers: How to Excel at Math and Science (Even If You Flunked Algebra)"** became a New York Times best-selling science book.

Each award comes with a plaque and honorarium, which Dr. Oakley will receive at the 2015 ASEE Conference and Exposition in June.

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