

Wellness, Sustainability, and the Greening of our Engineering Department

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In 2011 our Elizabethtown College Engineering Department launched the Sustainable Design Engineering option for the BS Engineering Program, and simultaneously added Green content into many courses including those in our BS Computer Engineering and BS Industrial Engineering Majors. In 2013 we launched our interdisciplinary Architectural Studies Minor which also has many Green and Sustainable Design courses. These programs are becoming very popular and are a perfect complement to our new Elizabethtown College Real World Learning requirements for all students.

Our department has also hosted two Sustainability Symposiums, and most of our department faculty are involved in sustainable initiatives throughout the College, the U.S., and internationally. We also have several collaborations with the new Elizabethtown College Social Enterprise Institute including a prescription healthy-food facility ("Pharmacy") and a Mobile Wellness Center ("Wellness Truck") to include Medical, Psychological, and Spiritual support for people around the world.



The first stage of the Wellness Truck project was a Design Competition organized by Dr. Wunderlich in Spring 2014 which awarded \$5,805 in prizes. The pictures shown are of the \$3,000 First Prize Design awarded to Kaylee Werner (BS Engineering-Sustainable Design 2015, Architectural Studies Minor 2015), Vaclav Hasik (BS Engineering-Sustainable Design 2014, BS Engineering-Mechanical 2014), and Ryan Shubert (Sophomore Architectural Studies Minor). This project will also likely influence the design of our College's new \$20,000,000 Wellness Center for which many of Dr. Wunderlich's 35 architectural-minded students will have the opportunity to begin conceptualizing in Fall 2014 (Twenty EGR343 Green Architectural Engineering students, and fifteen FYS100 Conceptual Architecture students including eleven engineers, and three pre-med). These students will also learn case-studies of past Elizabethtown College wellness, sustainability, and green initiatives presented internationally by Dr. Wunderlich

including those highlighted in Osaka, Japan (*2013 Key-note talk and paper at the 2013 Asian Conference on Sustainability, Energy & the Environment*), in Hawaii in 2013 in a Green Robotics Automation and Machine Intelligence paper presentation (*International Symposium on Green Manufacturing and Applications*), and in London England in 2014 in a Wellness, Sustainability, and Green Architecture and High-tech interactive-simulations paper presentation (*2nd International Conference on Emerging Trends in Engineering and Technology*).

