

New integrated science curriculum launched

A new undergraduate science program aimed at training students to synthesize and apply integrated scientific knowledge to solve society's biggest problems begins this week.



The program, called iCons for Integrated Concentrations in Science, is unique in the United States because it is a

four-year program that uses real-world problems to integrate the sciences, culminating in world-class research experiences, according to Chemistry professor Scott Auerbach.

He said The mission of iCons is to produce the next generation of leaders in science with the attitudes, knowledge and skills needed to solve the inherently multi-disciplinary problems facing the world. Instruction involves student teamwork on case studies, laboratory experiments, and research, to foster cross-disciplinary communication and integrated problem-solving skills.

The College of Natural Sciences is launching iCons concentrations in renewable energy and biomedicine. Case studies for these concentrations include malaria, genetically modified foods, the Bhopal disaster, the Gulf oil spill, biofuels vs. clean coal, and endocrine disruptors.

The first iCons student cohort consists of mostly first-year students and some sophomores from the departments of Biology, Biochemistry and Molecular Biology, Chemical Engineering, Chemistry, Environmental Sciences, Microbiology, Mathematics and Statistics, Physics, and Psychology. They will be taught by Justin Fermann, Chemistry, Sue Leschine, Microbiology, and Steven Petsch, Geosciences.

The 18-credit iCons curriculum consists of one course per year over the four years. All iConsrelated activities will take place in the new Integrated Sciences Building.

More Information

iCons website

January 19, 2011.