

'48-Hour Challenge' to include course for science teachers

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While their students are competing for a \$5,000 top prize in Alfred University's 48-Hour Challenge, teachers who accompany the teams will have an opportunity to earn continuing education credits. Twenty-one teams of five students each, along with two advisors who are often high school science teachers, will arrive on campus June 27. Beginning the morning of June 28, students will have a total of 48 hours to solve the problem for this year's competition, with winners announced at noon June 30. The Alfred University Institute for Science, Mathematics and Technology Education will be offering a course specifically designed to provide high school science teachers with materials they can use in their classrooms, as well as enabling the teachers to earn required credits and interact with post-secondary educators. "While their students were busy with the competition last year, faculty members who accompanied them were left with little to do," said Dr. G. David Toot, professor of physics and director of the Institute for Science, Mathematics and Technology Education. "We want student teams to work independently to solve the 48-Hour Challenge problem," he explained, "but we wanted teachers to also gain some benefit from the time spent on our campus." With that in mind, Toot, Dr. Stephen Pilgrim, professor of materials science and engineering, and other AU faculty members, as well as Andrew Corman, who is the engineering enrollment specialist with the Office of Admissions, began working on a continuing education course for the high school teachers. Corman, who is a frequent guest speaker in high school sciences classes, said he realized that high school teachers are constantly looking for "real-world examples" to demonstrate basic scientific principles for their students, so that's the focus of the course AU will offer. The program for teachers will begin June 27 with an overview of the course, which will cover the basic high school sciences - biology, chemistry, earth science and physics - and how they interact with each other. For the next two days, while their students are solving the 48-Hour Challenge problem, the high school teachers will have two-hour sessions that will provide them with hands-on activities that link real-world applications with high school science curricula. The final day, June 30, while judges are determining the competition winners, Pilgrim will link the foundational high school science courses with the exciting and ubiquitous field of materials. For the first year, Toot said, the course will be open only to those advisors who accompany teams in the competition. In future years, however, enrollment may be opened to others who want to earn continuing education credits in science teaching. The 48-Hour Challenge gives high school students a chance to compete for the top prize of \$5,000 - \$500 to each of the five students and \$2,500 for their school. Second and third prizes will be awarded to the runners-up. The competition began last year, with 11 teams participating. It was so successful, said Toot, that this year, "we had all our spaces filled well in advance of the registration deadline." He said he has a waiting list of schools who want to participate if space becomes available. Originally, Toot planned on taking 20 teams this year, but two registrations came in nearly simultaneously so he accepted 21. The competition is made possible by a gift to the University from Erick Laine, an AU trustee and chairman of the board of Alcas Corporation in Olean, which makes Cutco and K-Bar products; his wife, Marianne; and the Cutco Foundation. The gift covers not just the prizes, but room and board for all participants while they are on campus. The only cost to the school districts entering the competition is transportation for the team members and advisors. An engineer, Laine said he is sponsoring the competition because he believes in the value of an engineering education and hopes to encourage students' interest in the profession. Additional details about the competition are available at the website: <http://engineering.alfred...> more information about Alfred University, visit www.alfred.edu