Five UI scholars receive Innovations in Teaching with Technology Awards
Academic Technologies Advisory Council (ATAC) awards $85,000 in funding

Five University of Iowa scholars were awarded a total of $85,000 in support of their innovative approaches to teaching with technology. Sponsored by the Academic Technologies Advisory Council (ATAC), this year’s Innovations in Teaching with Technology Awards winners are:

H.S. Udaiyamurthi
Mechanical and Industrial Engineering
Award: $23,000
Proposal Title: Enhancing Student Learning in Transport Phenomena Related Engineering Courses Through Web-accessed Computational Fluid-Flow Modelling Tools
Udaiyamurthi was awarded $23,000 to develop a software interface to an existing world-class thermal and fluid-flow solver called pLATNUM that will enable its integration into formal and informal teaching activities. It is expected that this will have a major impact on student learning and exploration of modern pedagogy along with expanding undergraduate students’ ability to conduct and learn from independent research and open-ended course projects. More details...

Alberto Segre
Computer Science
Award: $10,000
Proposal Title: Hacking Algorithmic Thinking: Concrete via Collaboration with the Performing Arts - Year 2
Segre was awarded $10,000 for continued support of his funded FY13 proposal that called for the purchase of five programmable Aldabran NADH3 robots to support interdisciplinary collaborative learning among computer science and dance students. Students will learn core computational concepts by designing, choreographing, directing, and producing a robotic dance performance. More details...

Ibrahim Demiri
IHR Hydroscience and Engineering
Award: $12,000
Proposal Title: Web-based Augmented and Virtual Reality Flood Simulation Platform for Game-based Learning of Hydrological Concepts
Demiri was awarded $12,000 to develop a web-based interactive simulation environment for introducing hydrological concepts in engineering and science curricula. Students will receive hands-on experience in hydrological concepts, management actions, and effects of flooding in actual communities in Iowa. More details...

Marc Linderman
Geographical and Sustainability Sciences
Award: $5,230
Proposal Title: The Acquisition and Integration of Unplugged Aerial Vehicles in Spatial Analyses Courses
Linderman was awarded $5,230 to design a summer course that engages students in novel methods of spatial analysis through the use of Unplugged Aerial Vehicle technology and a set of related research opportunities. More details...

Renee Cole
Chemistry
Award: $13,100
Proposal Title: Transforming Content Delivery in Advanced Chemistry Laboratory Courses
Cole was awarded $13,100 to develop self-paced instructional modules that will allow students enrolled in advanced laboratory classes to access and review key information for laboratory experiments prior to conducting the experiments. The result will be more class time for instructors to focus on higher order learning objectives. More details...

The Academic Technologies Advisory Council assists the Provost’s Office and Chief Information Officer in setting directions and priorities for developing, implementing, and evaluating instructional technology directions for the university. Propositions for the Innovations in Teaching with Technology Awards are accepted on a rolling basis. Applicants are encouraged to get started on them now. ATAC provides feedback and assist in development of proposals. For more information, contact maggie-jesse@uiowa.edu or lori.riddles@uiowa.edu, or visit the award program’s website.

The innovations in Teaching with Technology Awards help fund innovative applications of instructional technologies that impact student success and retention. Applicants are encouraged to use emerging instructional technologies such as augmented reality, cloud-accessing, electronic books (ePubs), peer-based learning, game-based learning, game-based computing, learning analytics, mobile computing, personal web, open content, semantic-aware applications, simulations/labs for instruction, smart objects, social networking, virtual data analytics, and video (e.g., “grounded video”). For a description on each of these and other technologies used for instruction see: 2013 IAMC Horizon Report: Six Technologies to Watch. *