Instructional Technology creates BU virtual tour

Bloomsburg University of Pennsylvania is recruiting for the future by offering prospective students the opportunity to tour campus, not just in person, but also virtually, through an online 360-degree virtual reality (VR) campus tour.

Developed completely in-house by BU’s Department of Instructional Technology, the VR campus tour project began in September of 2017 and can be found on the web at msit.bloomu.edu/mf76924/samplevr.

Mason Fisher, graduate assistant for Instructional Technology and lead developer on the VR campus tour project, was approached with the project with a need from BU admissions to allow prospective students a chance to experience campus in a virtual environment.

“I took a personal interest in this project because I am very passionate about VR,” says Fisher.

Using the immerging imaging software 3DVista and a Ricoh Theta V 360 degree camera, Fisher, along with several professors and GAs from Instructional Technology, embarked on a yearlong mission to develop a VR campus tour that would look and feel as if the user was walking through BU’s campus.

The tour begins with a beautiful view of the iconic Carver Hall with the campus landscape seen behind. The user then takes on the perspective of a student walking on the sidewalks between buildings. Classes are in session, so other students are passed along the way on this sunny journey through campus. The next stop is Scranton Commons, where the user can take a 360-degree view from both outside the building and select locations from inside the building. The tour continues in this manner, visiting the inside and outside of all main buildings on campus, including the Rec Center and classrooms. The user then “drives” to upper campus to visit the upperclassmen apartments as well as Monty’s. One highlight for prospective students is the 360-degree student housing room images from various upper and lower campus options.

Service trip to Peru provides life lesson

Perri Harmon says she learned even on her worst days she remains very lucky, a lesson she took from her medical service trip to Peru this past spring.

Harmon, a senior exercise science major, went to Peru with Bloomsburg University’s MEDLIFE club — Medicine, Education and Development for Low Income Families Everywhere — which was established in Fall 2016 as a student chapter of the national MEDLIFE non-profit organization. BU is one of three PASSHE universities to have this club.

MEDLIFE’s mission is to help families overcome the constraints of poverty and the organization firmly believes access to quality healthcare is a basic human right. Harmon and thousands of other volunteers stand behind MEDLIFE’s mission by committing time, resources, knowledge, and hope to low income families everywhere.

“I had the opportunity to observe several medical professionals, but one that was..."
Nursing research showcased nationally

Heather Deimler, a junior nursing major, travelled to Dallas, Tx. to represent Bloomsburg University at the National Student Nurses’ Association National Convention.

The National Student Nurses’ Association is an organization comprised of thousands of nursing students throughout the country. The National Student Nurses’ Association National Convention is an event that promotes professional growth of students through a variety of educational sessions, facilitates professional networking with hospitals and graduate schools from across the United States and allows students to share their work via professional poster presentations.

While at the convention, Deimler presented a professional poster entitled, “Postpartum Hemorrhage: Pitocin and the Nurses' Role: A Literature Review,” that was developed as a result of a literature review she conducted as part of an undergraduate nursing research course.

Kapp recognized by LinkedIn

Bloomsburg University’s instructional technology professor Karl Kapp, Ed.D., has been recognized by LinkedIn on its Top 10 Voices in Education list for 2017.

The Top Voices list, based on LinkedIn users’ influence and reach to other members, annually recognizes ten standouts who are transforming education around the world. Kapp, who ranked ninth on the 2017 list, is a well-known professional in the instructional technology and eLearning industry.

As a professor, Kapp introduces concepts from his experience as an author of courses for LinkedIn Learning, formerly known as Lynda.com, to his classroom, emphasizing the need for educators to create engaging learning experiences.

Kapp has written several articles on LinkedIn regarding gamification of learning as well as professional development and has written several published books including “The Gamification of Learning and Instruction” and “Gadgets, Games, and Gizmos for Learning.”
Virtual tour
Continued from page 1

BU’s Assistant Director of Admissions, Cerick Austin, made the finishing touches to the tour.

“Because I have worked on this project and worked with VR it makes me very competitive. I understand not only its processes, but how it fits in my field.”

Fisher predicts that virtual and augmented reality will be the future of not only the eLearning and development industry, but technology as a whole. BU’s Department of Instructional Technology will be implementing virtual and augmented reality courses into their undergraduate and graduate curriculum in the upcoming semesters, giving BU students the opportunity to learn about these evolving technologies.

Service trip
Continued from page 1

really interesting was the dentist,” Harmon said. “I got to observe how they fill cavities and extract teeth.”

The procedures Harmon observed contained far less medication and advanced tools than what is normally seen in the United States, so it was a great learning experience on how to work with what is available to get the job done.

“It made me rethink what I take for granted and also made me appreciate what I have and how I live,” Harmon said. “The people in the communities we visited had very little, but were some of the happiest people I’ve ever met because they were surrounded by the people and the things they need and not much more.”

— Hannah Miller, history major

Research Experience for Undergraduates

The Research Experiences for Undergraduates program is a prestigious program by the National Science Foundation that supports active research participation by undergraduate students in any of the areas of research funded by the NSF. This year four students from the Department of Chemistry and Biochemistry were awarded REU. Lauren Barrett will go to Texas A&M, Daniel Staros has received an REU at Oak Ridge National Laboratory, Kim Hollister will be at the University of Tennessee in Knoxville, and Elizabeth Grego will do research at Iowa State University. This is a larger number of student awards than Bloomsburg has received in several years.

GRANTS

Margin of Excellence Grants
2018

John Huckans, George Davis, Angela Hess, Michael Borland, Ellen Kehres, Jennifer Venditti, William Coleman, John Pohill

R&S Mini Grant
2017-2018

Kyle Beyer, Ray Biswajit, Kristen Brubaker, John Hranitz, George Davis, Clay Corbin, Angela Hess, John Hranitz, Matthew Polinski, Moshin Shaikh, Cynthia Surmaz, Adrian Van Rythoven, William Coleman, Jennifer Venditti, Xiao Danqing, George Davis
COMMUNICATION SCIENCES AND DISORDERS


BIOLOGY AND ALLIED HEALTH SCIENCES


Calle, L., Green, L., Strong, A., Gawlik, D. 2017 Time-integrated habitat availability is a resource attribute that informs patterns of use in intertidal areas. Ecological Monographs.


CHEMISTRY


ENVIRONMENTAL, GEOGRAPHICAL, AND GEOLOGICAL SCIENCES


INSTRUCTIONAL TECHNOLOGY


MATHEMATICS AND DIGITAL SCIENCES


Kokoska, S. and Dick, T., TI in Focus Video Series: AP Calculus, December 2017


Philip Polstra, “USB Forensics Writeblocking and Impersonation.” (video course), PluralSight, February 2017


M.L. Stephans, Experiencing Ornette
**FACULTY PUBLICATIONS**
CONTINUED FROM PREVIOUS PAGE

**NURSING**


**PHYSICS & ENGINEERING**


Combining Nonlinear Noise Reduction with in-Painting in the Analysis of Variable Star Light Curves N. Jevtić et al. 10th Chaotic Modeling and Simulation Conference, CHAOS2017, June, 2017, Barcelona, Spain (oral)


**Geology student presents at Geological Society of America Conference**

Connor Gray, Professional Geology junior in the EGGS department, presented his research at the Geological Society of America conference in Flagstaff, Arizona. His poster titled “A Comparative Study of Porphyry Cu-Mo Deposit Mineralogy” was a presentation of his URSCA funded research with Dr. Adrian Van Rythoven, Assistant Professor in EGGS, which aimed to study samples from different copper deposits in North America. Dr. Van Rythoven also presented a poster, “Cost-Effective Use Of Automated Mineralogy To Calibrate Geometallurgical Characterization Of A Rare Earth Element Deposit” at the conference.

While in Arizona, Connor and Dr. Van Rythoven sampled lava flows from the San Francisco volcanic field north of Flagstaff. This summer the student/mentor team will continue their research using a new luminoscope that was recently funded by an R&S mini-grant.
Faculty Award Winners

The College of Science and Technology is proud to announce the faculty award winners for excellence in teaching, scholarly activity and service.

Dr. Chris Lynd, Mathematical and Digital Sciences (MADS), and Dr. Lori Metzger, Nursing were recognized for excellence in teaching.

Dr. Lynd came to Bloomsburg University after teaching high school for many years. He has implemented BU's Supplemental Learning Program into Applied Matrix Algebra (Math 118) and developed the Programming in Mathematics (Math 320) course, all while achieving high reviews from both faculty and students.

Dr. Metzger is the Program Director for the Nursing Health Administration MSN/MBS program, which has expanded five-fold in the past 2 years. She has developed and implemented two new courses and has developed four simulation experience for the undergraduate Public Health nursing students. She continues to innovate within the classroom, giving her students exceptional experiences.

Dr. Philip Polstra, MADS, and Dr. Michael Borland, Chemistry and Biochemistry were recognized for excellence in scholarly activity.

Dr. Polstra is recognized worldwide as a security and penetration testing expert, building his own devices to test computer system security. As a leader in the field, he is often an invited speaker at international conferences, asked to provide training sessions at hacking events, is quoted in news articles, and has made several television interview appearances.

Dr. Borland has mentored multiple undergraduate students and included them in his scholarly activity. He recently published an article in the journal Toxicological Sciences with featured four (4) BU undergraduates. This article was chosen as an Editor's Highlight for the October 2017 issue. In addition, Dr. Borland has presented a number of poster-sessions at conferences, earned funding from a BU Margin of Excellence grant, and has served as the faculty advisor for URSCA Research Grants.

Dr. Thom Klinger, Biological and Allied Health Sciences (BAHS), was recognized for excellence in service. As the Graduate Coordinator for BAHS, he works diligently to recruit students and match them with a graduate faculty mentor. In addition, he works to obtain funds, develop graduate curricula, and liaisons with the broader School of Graduate Studies. Outside Bloomsburg, he participates in many international professional associations.

Chemistry students present research at national ACS meeting

Three Bloomsburg University chemistry students, Todd Poe, Daniel Staros, and Devin Mulvey, traveled to New Orleans on Sunday, March 18, to present their research at the 255th American Chemical Society (ACS) National Meeting & Exposition.

The ACS national meeting gives chemistry professionals an opportunity to share their passion for chemistry as well as their advanced scientific and technical knowledge with other professionals, connecting the world’s largest scientific society.

Before presenting at the national meeting, participants were required to submit an abstract of their research to be approved by the ACS.

“We were notified within one month that our abstract had been accepted for presentation at the convention,” says Staros, who worked with Dr. Gregory Zimmerman to look at data on electrolyte potassium chloride (KCl) in extremely pressurized water, and design multiple equations that describe the behavior of these solutions.

Mulvey presented research focused on using computational chemistry to probe the antioxidant properties and stability of fullerenols.

“I was interested in performing computational research and found Dr. Lewis’s work engaging, so it was a match,” says Mulvey. “Since fullerenols are water soluble and pick up free radicals, it has been proposed that they could be used to combat tissue damage from diseases that cause oxidative stress.”

Poe submitted an abstract of his work with Dr. Matthew Polinski focused on synthesizing materials that can be used to remove environmental pollutants from water sources.

“We were successful in making several new compounds that we believed might accomplish this task by exchanging toxic substances in water for ones that were less harmful,” says Poe. “After performing some experiments with our compounds, we received positive results suggesting our materials could be useful in removing detrimental particles from water.”
We welcome alumni to be engaged and participate in these events. Email COST.alumni@bloomu.edu with any questions or to register.

Friday, Oct. 5 – Pathways in Science & Technology, Kehr Union 10 a.m. to 3:30 p.m.
Science & Technology Networking Event – Greenly Center Art Gallery 4 to 6 p.m.


Wednesday, Nov. 14 – Lecture, “From Penguins to Plankton – The Dramatic Impacts of Climate Change on the Antarctic Peninsula,” by James McClintock, Endowed University Professor of Polar and Marine Biology, University of Alabama at Birmingham, 7 p.m., Carver Hall Gross Auditorium.