MOOC Matters: Offering Labs Online

AMELIA PAVLIK
INSTITUTE COMMUNICATIONS

Figuring out how to offer the lab component of a course has been a challenge for faculty members as they develop massive open online courses (MOOCs) — until now.

Georgia Tech’s Introductory Physics MOOC, which launched on May 20, is using video labs to simulate the experience students would typically have in the classroom. This topic has become the focus of one of seven mini innovation hubs that are researching questions related to MOOCs and online learning.

“The videos single students out in a way that forces them to demonstrate their knowledge in a brief period of time, in a way that forces them to demonstrate their knowledge in a brief period of time, and it’s easier for instructors to hone in on who is getting the material and who isn’t.”

There are 17,000 students enrolled in the MOOC, 11 of which are a part of a for-credit Georgia Tech version of the course where students have both online and on-campus experiences. (More details on the structure of this MOOC will be featured in a future Whistle article.)

All students are asked to complete five labs as part of the course, which will wrap up the last week of July. Each lab requires students to do the following:

• Upload the video to YouTube.
• Compare the observations to the models.
• Create models of motion using computer programs written in Python/VPython.
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• Analyze the video using the free video analysis package, Tracker.
• Record a moving object (using any device that will take video).
• Create models of motion using computer programs written in Python/VPython.

Students in the Introductory Physics massive open online course are asked to complete five, five-minute video labs as part of the coursework.

MOOC LABS, continued on page 2

Event Provides Chance to Reflect on Diversity Attitudes

AMELIA PAVLIK
INSTITUTE COMMUNICATIONS

In the June 10 issue, Paul Kohn shared that he was looking forward to the Diversity Roundtable because he hoped it would offer a chance to reflect on his attitudes toward diversity. So did the event live up to Kohn’s expectations?

“I was extremely impressed,” said Kohn, vice provost for Enrollment Services. “For example, I was reminded that others may hear your words differently than you mean them.”

One moment that stood out in Kohn’s mind occurred at the event’s luncheon, when a woman shared that colleagues using the word “guys” to refer to men and women was offensive to her.

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Paul Kohn participates in a discussion with his teammates during the June 5 Diversity Roundtable luncheon.

“Do you guys want to go to lunch,” Kohn said. “But this woman felt like when people said, ‘Do you guys want to go to lunch,’ it didn’t include her. This was one of those aha moments I wouldn’t have had if I didn’t attend the event.”

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Campus Community Celebrates Carter’s Retirement

Last Tuesday, members of the campus community gathered to celebrate John Carter Jr., president and chief operating officer of the Georgia Tech Foundation Inc., and his 30 years of service to the Institute. He will step down at the end of June. A Tech alumnus, Carter was hired as director of marketing for the Alumni Association in 1983 and was named vice president and executive director two years later. In 1999, he came to the Foundation as vice president and COO, eventually becoming president and COO.

www.gtf.gatech.edu

DIVERSITY, continued on page 3
IRI Intros: 3 Questions with Norman Marsolan

You probably have heard that Georgia Tech has Interdisciplinary Research Institutes (IRIs) — but do you know much about them?

This article is part of a series to introduce the eight IRIs and their directors. In this issue, Executive Director Norman Marsolan answers questions about the Institute of Paper Science and Technology (IPST).

How does IPST link the forest bioproducts industry with Tech, and what are IPST’s strategic objectives?

The forest yields an abundant raw material — cellulose — for conversion and upgrade through a broad array of scientific disciplines and ingenuity. IPST is not just about paper. It’s about upgrading an available resource for the good of society and the economy.

With four schools, 20 professors, and 50 graduate students collaborating to develop value and opportunity from the forest, IPST provides a two-way portal between industry and Tech. This portal gives this U.S. industry ready access to a leading research university and its breadth and depth of capability.

In turn, the Institute gains access and insights into an industry processing cellulose — the most abundant polymer on earth — so it can create 21st-century materials and products.

The value of our interdisciplinary experience and the good of society and the economy.

Similarly, the multibillion-dollar forest bio-products industry has much to gain by availing itself of the full range of Institute research opportunities. IPST can help companies, alone or in collaboration, design projects, attract funding, and access research expertise. IPST also offers research services, which include chemical analysis, gasification, microscopy, paper physical analysis, pulp analysis, and chemical recovery.

Is IPST set up to support interdisciplinary research?

The fact that the Paper Science and Engineering program draws students from four schools promotes our interdisciplinary character. Students participating in this program enroll through Chemical and Biomolecular Engineering, Chemistry and Biochemistry, Materials Science and Engineering, and Mechanical Engineering. We have also attracted faculty who work collaboratively across research centers such as the Center for Photonics and Electronics and other IRIs, including the Institute for Bioengineering and Bioscience.

The value of our interdisciplinary experience was cited by one of our recent Ph.D. graduates in Chemical and Biomolecular Engineering. She said the emphasis on biomaterials and renewable materials attracted her attention; she believes the skills and perspectives she learned in those areas will be useful no matter what industry she serves.

Describing the benefit of collaborating in an IRI, she referred to the broad diversity of students in the IPST building. She had friends there whom she could approach for materials science, biology, or chemistry perspectives. She is now well connected in many more fields as a result.

The Q&A, in its entirety, is available at http://c.gatech.edu/12N8qg8

Reprint requests to Amelia Pavlik, apavlik3@gatech.edu.
When it comes to the First-Year Reading program, its success relies just as much on faculty and staff support as it does on student participation. “This year’s book, Living With Complexity by Don Norman, was selected to connect with themes in Georgia Tech’s strategic plan, particularly those around design and innovation,” said Steven Girardot, associate vice provost for undergraduate education. “We hope the book stimulates discussion on these topics among faculty, staff, and students.”

The premise of this year’s book is that bad design complicates all aspects of our lives, while good design can “tame” complexity. According to Norman, “Designers have to produce things that tame complexity. But … we have to take the time to learn the structure and practice the skills. This is how we mastered reading and writing, driving a car, and playing sports, and this is how we can master our complex tools.”

Each year, the First-Year Reading book is selected by a committee comprised of faculty, staff, and students. Incoming freshmen learn about the program and receive their copy of the book over the summer when they attend FASET orientation. They are asked to complete it by the time fall semester classes begin. All members of the campus community are encouraged to join the incoming first-year class by reading the book and participating in the related reading groups, speaker series, and student-led forums held during the academic year.

Events are currently being planned and will be updated throughout the semester on the Center for Academic Enrichment website. In addition to these activities, faculty members and 1101/1102 and GT 1000 instructors often integrate the book into their lesson plans. (The Center for Academic Enrichment’s website will contain a curriculum guide to assist in this planning by August.)

When Esther Jordan integrated Martin Luther King Jr.’s I Have a Dream: Writing and Speeches that Changed the World (the 2011 First-Year Reading book) into her GT 1000 course, she encouraged students to attend several campus events related to the reading. “And we invited Stephanie Ray, associate dean of students, to speak to our class,” said Jordan, assistant director for programming in the Center for the Enhancement of Teaching and Learning (CETL) and a visiting assistant professor in the School of International Affairs. “She performed a monologue in the voice of Coretta Scott King with students — and then engaged them in a dialogue about the text.”

The First-Year Reading program is coordinated by Nirmal Trivedi, director of academic transition programs in the Center for Academic Enrichment. Faculty and staff interested in integrating the First-Year Reading text into their classes or coordinating programs around the book should contact Trivedi at nirmal.trivedi@gatech.edu for a copy.

www.enrichment.gatech.edu
Most people run away from a fire — and then there’s Larry Labbe.

“I’ll hear the sirens, and my adrenaline will start to pump,” said Labbe, Georgia Tech’s fire marshal who spent years fighting fires for Cherokee County. “It’s like a knee-jerk reaction that I still want to be part of the team making a difference.”

Labbe likes to say that fire service found him. Both his uncle and grandfather were firefighters. So when Labbe was working for Kroger and had to complete volunteer hours as part of the company’s tuition reimbursement program, it seemed logical to become a volunteer firefighter, which evolved into a full-time job.

“There were times I would fight as many as three fires in one shift,” said Labbe. “I loved being able to help others,” he said.

“But my mind wasn’t being challenged, and for me, that’s a huge part of career enrichment.”

After a stint in the Cherokee County Fire Marshal’s Office, Labbe applied for his current position and began work in 2010.

“This job has just been the perfect fit for me,” Labbe added. “There’s so much for me to learn. I’m constantly challenged.”

Read on to learn more about Labbe and his time at Tech.

What’s an average day like for you?

I assist with fire safety-related planning for everything from campus events to partnerships between Atlanta Fire Rescue and campus. I also teach GT1000 and am responsible for the fire safety training offered on campus. And I’m currently pursuing a four-year executive fire officer certification program through the National Fire Academy, which I will complete in July.

What would you like people on campus to know about your job and office?

My office is a state-deputized fire marshal’s office, and part of the Tech community. We offer a variety of fire prevention programs, through training and collaboration. We enjoy working with all the colleges and departments on campus.

What is the greatest challenge associated with your job?

Trying to figure out the best way to share fire safety messages with different audiences. For example, the way I communicate a message to a college freshman is very different from the way I’d share it with a 15-year veteran researcher.

What is the one piece of technology you couldn’t live without?

My iPhone. I move from place to place based on what my iCal tells me to do, and I rely on the work-related apps (such as a light meter app) that I have on the phone.

Which do you prefer: Facebook, Twitter, or a world without any of it?

Facebook. It’s been so helpful in terms of reconnecting mewith people I went to school with when I was younger.

Where is your favorite spot on campus?

I love the Fifth Street Bridge. Tech managed to do something different with a typical hard structure like a bridge. We reclaimed it with nature.

What is the greatest risk you’ve taken?

In all of the fires that I fought, there was only one place I felt like I was risking my life. That was the one time where the risk was probably much greater than the reward. But thankfully, we all made it safely out.

What’s the best advice you’ve heard?

Never turn your back on a fire.

Where is your favorite place to eat lunch?

Six Feet Under, and I order the fish tacos.

Tell us something unique about yourself.

I was the Southern Polytechnic State University basketball team mascot for a couple of years.

7 Strategies for Managing Stress at Work

Whether it’s an impending deadline or a cranky co-worker, stressors are common in the workplace. But if you don’t know how to cope with them, you can wreak havoc on much more than your productivity at work.

A recent Be Well seminar, hosted by the Office of Human Resources, focused on providing Georgia Tech faculty and staff with strategies to manage stress at work. The seminar proceedings are now available for viewing online. Previous BE WELL seminars focused on communication, conflict resolution, and standing up for yourself in the workplace.

Mark Your Calendar

The next Be Well event will be held on July 9 and will feature Bank at Work seminars and an expo. Seminars will focus on topics ranging from purchasing a car to women and investing. Register at http://c.gatech.edu/11otjyt6.

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Community News

Labbe Finds ‘Perfect Fit’ as Fire Marshal

AMELLA PAVLIK
INSTITUTE COMMUNICATIONS

Larry Labbe at his favorite spot on campus — the Fifth Street Bridge.

“Tension, insomnia, upset stomach, headaches, sadness, and increased blood pressure. And if you don’t deal with stress, it can lead to depression and can aggravate existing health conditions including diabetes, libromy, arthritis, and asthma. Through the skins, which highlighted various stressful work situations, the Kaiser team shared the following strategies for keeping stress under control:

- Don’t keep it bottled up inside.
- Work smarter, not harder. For example, if you’re crunched for time, and faxing a form will take you an hour. Remember that it’s also an hour that you could be doing something else.
- Set realistic expectations. If someone is asking you for help, don’t say you’ll get back to them in five minutes if it’s really going to take you an hour. Remember that it’s also OK to say “no.”
- Embrace progress, not perfection. See mistakes as an opportunity to grow.
- Communicate. The earlier you can communicate, the better. For example, needing time off from work or a certain number of copies for a meeting, the better.
- Reframe. Step back and take a deep breath.

During a recent Be Well seminar, members of Kaiser Permanente’s Educational Theatre Program used interactive strategies to teach Tech employees with strategies to cope with stress.

Dealing with your stressors, but don’t just have a ranting vent session. Change the way you look at situations so that you’re not just getting frustrated and seeing the negative.

Do something you enjoy. Get involved with activities that are physically, intellectually, and/or spiritually engaging and don’t involve the pressure of competition or accountability.

For more information, visit www.ohr.gatech.edu/bewell.

2BR/1BA house with den for rent in westside Atlanta area. Quiet dead-end street. Large, beautiful yard. Well-maintained. Easy access to Tech, Buckhead, I-75, and I-285. $925/mo. Available now. Email janjp@pax.gatech.edu or call 404-316-3906.

3BR/2BA spacious, furnished, water-front cottage along the southern outer beaches (Monhegan City, N.C.). $750/week. With/it, Marriot AC/heat, drawers, 400 ft. dock, and boat slip. No smoking or pets. For more info, visit http://travel.ajc.com/ad/158 or email judy.wally@gatech.edu.

1BR/1BA apartment in downtown Virginia Beach. A block from the Fifth Street Bridge. Quiet third floor with W/D, dishwasher, alarm, balcony, off-street parking, pool, barbecue, and fitness. Available now. $945/mo. Email jelybawn@hotmail.com.

Beautifull 3BR/2BA, 4,200 sq. ft. house for rent in a swim/tennis community. 20 min. to Tech, 5 min. to Silver Comet Trail. Large privacy backyard, lake view, basement, sunroom, and covered deck. Email ronishafin@gatech.edu or call 404-291-5785.

2BR/2BA condo for sale just off Howell Mill Road. Great for couple who wants to live in Buckhead. Gated with off-street parking. Available now. $425k discount for Tech employees/students without agent. Email carol@hennermenre.com.

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