

From: "Gregory A. Moses" <moses@engr.wisc.edu>
Subject: Re: Fwd: class schedule
Date: August 19, 2013 6:51:48 PM CDT
To: Trina McMahon <tmcmahon@cae.wisc.edu>
Cc: Regina Murphy <regina@engr.wisc.edu>, Maury Cotter <mcotter@wisc.edu>, WENDY CRONE <crone@engr.wisc.edu>, "Steven M. Cramer" <cramer@engr.wisc.edu>, Wayne Pferdehirt <wppferde@wisc.edu>, Elizabeth Fadell <fadell@wisc.edu>, Naomi Chesler <chesler@engr.wisc.edu>, Jane Dymond <jdymond@wisc.edu>, Dan Negrut <negrut@engr.wisc.edu>, Jake Blanchard <blanchard@engr.wisc.edu>

Trina, Since I have this list, I'm sending this message sent to me by Mike Corradini. Perhaps you could park it on the website somewhere. Granted, CS is a perfect degree for online because it is ABOUT computers and having a computer to take the course likely means you have the equipment to do the homework, unlike engineering where you likely need a lab to mix concrete or measure pressures and temperatures or gamma rays, or whatever. However, it is news like this that establishes the bar for what constitutes leadership and innovation, like it or not.Greg

Begin forwarded message:

Date: August 18, 2013 11:25:56 AM CDT
To: Michael Corradini <corradin@cae.wisc.edu>

Master's Degree Is New Frontier of Study Online - NYTimes.com

Next January, the Georgia Institute of Technology plans to offer a master's degree in computer science through massive open online courses for a fraction of the on-campus cost, a first for an elite institution. If it even approaches its goal of drawing thousands of students, it could signal a change to the landscape of higher education.

From their start two years ago, when a free artificial intelligence course from Stanford enrolled 170,000 students, free massive open online courses, or MOOCs, have drawn millions and yielded results like the perfect scores of Battushig, a 15-year-old Mongolian boy, in a tough electronics course offered by the Massachusetts Institute of Technology.

But the courses have not yet produced profound change, partly because they offer no credit and do not lead to a degree. The disruption may be approaching, though, as Georgia Tech, which has one of the country's top computer science programs, plans to offer a MOOC-based online master's degree in computer science for \$6,600 — far less than the \$45,000 on-campus price.

Zvi Galil, the dean of the university's College of Computing, expects that in the coming years, the program could attract up to 10,000 students annually, many from outside the United States and some who would not complete the full master's degree. "Online, there's no visa problem," he said.

The program rests on an unusual partnership forged by Dr. Galil and Sebastian Thrun, a founder of Udacity, a Silicon Valley provider of the open online courses.

Although it is just one degree at one university, the prospect of a prestigious low-cost degree program has generated great interest. Some educators think the leap from individual noncredit courses to full degree programs could signal the next phase in the evolution of MOOCs — and bring real change to higher education.

"Perhaps Zvi Galil and Sebastian Thrun will prove to be the Wright brothers of MOOCs," said S. James Gates Jr., a University of Maryland physicist who serves on President Obama's Council of Advisors on Science and Technology. "This is the first deliberate and thoughtful attempt to apply education technology to bringing instruction to scale. It could be epoch-making. If it really works, it could begin the process of lowering the cost of education, and lowering barriers for millions of Americans."

The plan is for Georgia Tech to provide the content and professors and to get 60 percent of the revenue, and for Udacity to offer the computer platform, provide course assistants and receive the other 40 percent. The projected budget for the test run starting in January is \$3.1 million — including \$2 million donated by AT&T, which will use the program to train employees and find potential hires — with \$240,000 in profits. By the third year, the projection is for \$14.3 million in costs and \$4.7 million in profits.

The courses will be online and free for those not seeking a degree; those in the degree program will take proctored exams and have access to tutoring, online office hours and other support services. Students who cannot meet the program's stringent admission standards may be admitted provisionally and allowed to transfer in if they do well in their first two courses. And students who complete only a few courses would get a certificate.

"This is all uncharted territory, so no one really knows if it will go to scale," Dr. Galil said. "We just want to prove that it can be done, to make a high-quality degree program available for a low cost."

Would such a program cannibalize campus enrollment? "Frankly," he said, "nobody knows."

Not everyone believes that such a degree program will be sustainable, or that it would even be a step forward.

"The whole MOOC mania has got everyone buzzing in academia, but scaling is a great challenge," said Bruce Chaloux, the executive director of the Sloan Consortium, an advocacy group for online education. "I have to believe that at some point, when the underwriting ends, to keep high quality, Georgia Tech would have to float to more traditional tuition rates."

(Page 2 of 2)

Some faculty members worry that despite Dr. Galil's pledge that the program will match the quality and standards of the on-campus master's program, it could dilute the value of a Georgia Tech degree. And as in California, where Udacity has worked with San Jose State University to offer three basic math courses — now paused because of underwhelming student performance — some object to the idea of outsourcing part of their work to a for-profit company like Udacity.

"If you spend a lot of money, you can make online great, and this will probably be a showcase program," said Chris Newfield, a professor at the University of California, Santa Barbara, who is studying online education. "But we in universities could do that ourselves if we had that money, and the whole history of private involvement in public education has been one of extracting resources. However well-intentioned, we don't need a Trojan horse product that will take money out of the system."

There is no question, educators say, that online learning will continue to spread. But whether massive open online courses are the approach that will win out and bring real change is not clear.

"A very large number of public universities are experimenting with how online delivery can increase quality and contain costs," said M. Peter McPherson, the president of the Association of Public and Land-Grant Universities. "Using MOOCs for a low-cost graduate degree certainly crosses a threshold," but, he added, so does Virginia Tech's practice of teaching freshman math through self-paced online courses with lower costs and better outcomes. "We're going to see more online learning," he said, "but not one single absolute model."

The three leading MOOC providers, Udacity, Coursera and edX, have grown at a remarkable rate, adding hundreds of courses with dozens of college and university partners. But the path ahead is less clear, and all three are working with universities to find ways in which their courses can be used for credit. Some state universities, leery of ceding control to outside organizations, lean toward developing their own programs and platforms.

For-profit colleges like the University of Phoenix, whose tuition generally falls between state institutions and private not-for-profit universities, were the first to offer large online degree programs. But for-profit enrollment has declined because of the recession, increased government scrutiny and Congressional hearings finding that their students had low graduation rates and high loan default rates. And with so many traditional institutions now offering online degrees, the for-profit colleges may have a tougher time attracting students.

Many public universities have recently expanded online degree programs costing as much as their on-campus programs. But if the Georgia Tech program attracts thousands of students — a big if — that pricing model may be vulnerable.

"Online is a scale game, so the Georgia Tech thing is interesting," said Phil Regier, executive

vice provost of Arizona State University Online, which takes in \$90 million annually in revenue. “What we’re seeing is different price points for different levels of faculty involvement. If you want no touch, or very little touch, they’ll deliver that for \$6,000. If you want a higher-touch program, taught and graded by regular faculty, with a lot of faculty interaction, it’s going to be more expensive.”

Mr. Regier said he did not know whether Georgia Tech’s model would succeed.

“What I do know is that if they attract 5,000 students, I don’t want to be doubling down on our computer science master’s program,” he said. “You have to know your market.”

The Florida Legislature has directed the University of Florida to start fully online bachelor’s degree programs and set the price for residents at three-quarters of the campus in-state tuition, or about \$4,700. But Bernie Machen, the university’s president, said he had not yet decided whether to charge out-of-state online students the full \$28,000 tuition they would pay on campus, in part because he wondered if online pricing models were changing.

“Most of us got into online graduate programs more from the revenue side than the service side,” said Mr. Machen, whose university brings in \$75 million annually from its more than 70 online graduate degree programs. “It was an untapped market.”

Mr. Machen, like others, said he was puzzled by Georgia Tech’s optimistic financial estimates for its program, and was not sure they would work out.

Higher education officials say they will be watching closely.

“Georgia Tech is exceptionally important because it’s a prestigious institution offering an important degree at very low cost with a direct connection to a Fortune 100 corporation that will use it to fill their pipeline,” said Terry W. Hartle, the senior vice president of the American Council on Education. “It addresses a lot of the issues about universities that the public cares about. But how good and how transferable it is remain to be seen.”

On 8/19/2013 5:36 PM, Trina McMahon wrote:

Hi folks,

A note from one of our constituents, and my response.

trina

Begin forwarded message:

From: Trina McMahon <tmcmahon@cae.wisc.edu>

Subject: Re: class schedule

Date: August 19, 2013 5:12:13 PM CDT

To: Vicki Bier <bier@engr.wisc.edu>

Hi Vicki,

Thanks for your note! Sorry for the slow response, I was on vacation last week. Trying to get a handle on the burgeoning email inbox right now.

We haven't thought specifically about this issue yet, though there are plenty of details that need to be worked out when we start talking about online courses and we've tossed some of them around already. I'll definitely add this to the list of things to address. Honestly, we haven't gotten deep enough into the weeds of any specific recommendations yet... still trying to narrow down what we need for the college strategic plan.

best,
trina

On Aug 15, 2013, at 11:58 PM, Vicki Bier wrote:

Question regarding the education committee:

Industrial engineering is thinking of "outsourcing" one of our courses -- either having students take it somewhere else that offers a "true" online version, or using a commercial product that offers a full "course in a box" (e.g., a textbook that comes packaged with video lectures, online graded homework assignments, etc.). Neither of those is feasible yet, but the department is thinking about moving in that direction in a couple of years, if and when that BECOMES feasible. The main issue I see with the first option (having students take the course online somewhere else) is that they may not then be considered full-time students (e.g., if taking 11 credits at Madison and three credits somewhere else). Has the education committee thought at all about that kind of situation? Seems to me that in the long run, the whole issue of full-time status may go away, if students end up taking a mix of courses from multiple different institutions -- but someone in the administration will need to work out how to deal with that.

Can you get back to me on this issue?
--Vicki

Katherine (Trina) McMahon, Professor
Goddess of Funkosity
Departments of Civil and Environmental Engineering and Bacteriology
Environmental Chemistry and Technology Program
Freshwater and Marine Science Program
Microbiology Doctoral Training Program
Co-Faculty Director, Delta Program (<http://www.delta.wisc.edu>)

Office: 5552 Microbial Sciences Building (MSB)

Lab: 5525 MSB

Mailing Address:

3204 Engineering Hall, 1415 Engineering Drive
University of Wisconsin - Madison, Madison, WI 53706-1691

Phone: 608/890-2836 Fax: 608/262-9865

Email: tmcmahon@engr.wisc.edu

McMahon Lab: <http://mcmahonlab.wisc.edu/>

North Temperate Lakes Microbial Observatory: <http://microbes.limnology.wisc.edu/>

Katherine (Trina) McMahon, Professor
Goddess of Funkosity
Departments of Civil and Environmental Engineering and Bacteriology
Environmental Chemistry and Technology Program
Freshwater and Marine Science Program
Microbiology Doctoral Training Program
Co-Faculty Director, Delta Program (<http://www.delta.wisc.edu>)

Office: 5552 Microbial Sciences Building (MSB)

Lab: 5525 MSB

Mailing Address:

3204 Engineering Hall, 1415 Engineering Drive
University of Wisconsin - Madison, Madison, WI 53706-1691

Phone: 608/890-2836 Fax: 608/262-9865

Email: tcmahon@engr.wisc.edu

McMahon Lab: <http://mcmahonlab.wisc.edu/>

North Temperate Lakes Microbial Observatory: <http://microbes.limnology.wisc.edu/>

--

Gregory A. Moses, Harvey D. Spangler Professor
Engineering Physics, University of Wisconsin-Madison
1500 Engineering Drive, Madison, WI 53706
Phone: 608-265-6567, Cell: 608-575-7932