New Bachelor’s Degree Fills Critical Need, Begins This Fall

A new environmental health bachelor of science degree program in the School of Health and Environment at UMass Lowell was recently approved by the Massachusetts Board of Higher Education.

The one-of-a-kind program in the Northeast will begin September 2010, meeting a growing demand from the public health field. The Centers for Disease Control and Prevention estimates that half of current environmental health practitioners will retire within the next 10 years.

“This new environmental health program at UMass Lowell will offer a new generation of students the opportunity to learn skills that will help them tackle the world’s toughest problems, many of which are preventable,” says Assoc. Prof. Joel Tickner of the Department of Community Health and Sustainability, who led the development of the new program. “Our research and interviews showed that with the shortage of qualified professionals, students will have tremendous career options that will make a difference for all of us.”

Environmental health, a branch of public health, includes the study of epidemiology, toxicology, sanitation, occupational health and safety, food safety, health communications and policy. It involves learning about all aspects of the natural and built environment that may affect human health.

“This new program fits in with the vision of the School of Health and Environment to better understand the complex links between our environment and health,” says Shortie McKinney, dean of the School of Health and Environment. “This critical thinking is necessary to turn problems into solutions to prevent diseases and human hardships.”

Opportunities for environmental health specialists are diverse—they work as inspectors, health and safety experts, scientists, researchers and analysts at local, state and federal environmental and public health agencies, as well as for industry, consulting firms and not-for-profits.
Cyber Criminals Beware: UMass Lowell Researchers Are on the Hunt

$1.3 million in NSF Funding Will Enhance Wireless Use, Cyber Security

Five professors at UMass Lowell’s Center for Network and Information Security (CNIS) have received more than $1.3 million in grants from the National Science Foundation (NSF) this year. The funds will help support projects designed not only to enhance wireless connectivity and computer-science education, but also to help protect our national cyber infrastructure.

“The number of cyber crimes has increased dramatically as mobile computing, wireless networks and the Internet become pervasive and ubiquitous,” says Prof. Jie Wang, chair of the Computer Science Department and director of the CNIS. “Common cyber crimes include sexual exploitation of children, identity theft, intellectual property theft, financial fraud and industrial espionage, to name just a few.”

The projects funded by the NSF include building cyber trace-back toolkits; developing algorithms and toolkits to diagnose and troubleshoot smartphone access problems; developing a theoretical foundation for wireless positioning in challenging environments, including cyber crime scenes; research on wireless sensor networks; and support for student research.

In addition, NSF is interested in funding a program to create a network forensics curriculum at UMass Lowell. That project is expected to bring in an additional $188,000.

“Cyber forensics is a fast-growing area and serves a critical role in industry, federal and state law enforcement, and other national cyber-defense forces,” says Wang. That is why we are proposing the creation of a Cyber Forensics Laboratory on campus for complex cyber crime-scene investigations.”

Learn and Serve Program Offers Urban Immersion

Students Spend Spring Break Helping in Lowell

Spend spring break lolling on a beach in Florida? Not these college students—who instead worked on community service projects close to home as part of a federally funded Learn and Serve program at UMass Lowell.

“I could not have been more surprised and amazed by what I learned over spring break,” says Kristen Tabacco, a graduate student in education at the University. “What I and fellow volunteers discovered was not only a network of nonprofits with marked accomplishments, but extraordinary people doing extraordinary things throughout the community.”

At the Coalition for a Better Acre (CBA), the volunteers helped with an informational and bingo night event to dispel misconceptions about the 2010 Census. Students painted the entrance room of Rape Crisis Services of Greater Lowell. They helped prepare and serve lunch to homeless clients at the Lowell Transitional Living Center. And, in the Revolving Museum, they worked with the Teen Arts group to create a public art project—The Big Head.

Learn and Serve is funded through the Corporation for National and Community Service with a grant awarded to the UMass system in 2009. Its goal is to expand student and faculty involvement in the community through service learning and community service work.

Elaine Donnelly, project manager at the Center for Family, Work and Community, coordinates the program.

Twenty Years of Toxics Use Reduction Celebrated

Seventeen Massachusetts Companies Honored for Leadership

 Ahead of its time 20 years ago with the passage of the Toxics Use Reduction Act (TURA), Massachusetts continues to lead the nation in reducing use, waste and emissions of toxic chemicals. The same year the legislation passed, the Toxics Use Reduction Institute (TURI) was established at UMass Lowell to carry out the mission of TURA.

To recognize the accomplishments over the past two decades, state environmental agencies and dignitaries have been visiting Massachusetts companies to highlight and honor each for its performance and leadership.

“We selected Cobham for its environmental achievements and the open and collaborative approach they embraced to help other companies to do the same,” says Greg Morose, Industry Research Program Manager for TURI, referring to the Lowell-based Cobham sensor systems. Says Michael Ellenbecker, professor of Work Environment and director of TURI, as well as a contributor to the TURA legislation, “Over the years, companies have saved millions of dollars through the use of safer chemicals and more efficient production processes as well as conservation efforts, resulting in significant reductions in workplace and community chemical exposures. The TURA Program remains a powerful public/private partnership.”

Cobham Sensor Systems in Lowell was one of the environmental leaders recognized by State Senator Steve Panagiotakos and the Massachusetts Toxics Use Reduction Act program recently. From left are Ralph Marrone, general manager of Cobham’s Lowell facility; Panagiotakos; Bob Canedo, manager of safety, health and environment at Cobham; and Mike Ellenbecker, Greg Morose and Liz Hammann—all of the Toxics Use Reduction Institute at UMass Lowell.
There’s a New Sheriff in Town
Randolph Brashears Named University Police Chief

A veteran police officer with a distinguished record in community policing and campus public safety will be the UMass Lowell’s new police chief.

Randolph Brashears of Palmyra, Va., was recently named UMass Lowell’s director of public safety. He joined UMass Lowell in early April and an official swearing-in ceremony will be held May 4.

Brashears’ career includes 20 years with the Baltimore County Police Department in Maryland, including roles in criminal investigations, internal affairs and the community drug and violent interdiction team. His last nine years with the department were focused on community policing, including working with elected officials and neighborhood groups to solve problems and build relationships. Since 2007, he has served as commander of investigations for the University of Virginia Police Department.

“Lt. Brashears brings a unique blend of experience to UMass Lowell, offering tremendous skills and experience in community policing and in campus public safety,” says Chancellor Marty Meehan. “We were looking for someone who offers both solid leadership in law enforcement as well as the proven ability to be a relationship-builder, both on campus and in the community.”

Brashears holds a bachelor’s degree in criminal justice from the University of Baltimore and has also studied at the University of Virginia. He has undergone extensive specialized law enforcement training, including programs with the FBI, as well as those focused specifically on campus public safety.

Brashears will succeed Allan Roscoe, who served as interim chief since 2008 and did not apply for the permanent position. Roscoe will return to the Department of Criminal Justice and Criminology, where he teaches courses on homeland security and anti-terrorism.

Liftoff! Professors Give NASA Shuttle a Helping Hand
UMass Lowell’s Avitable and Niezrecki Tour and Present at Kennedy Space Center

Peter Avitable and Christopher Niezrecki, both mechanical engineering professors at UMass Lowell, could not believe it a few weeks ago when they found themselves climbing the gangplank to the astronauts’ entry hatch on the space shuttle Endeavour, just 36 hours before liftoff.

“I still don’t believe we got that close,” says Avitable. “Even the engineers who escorted us hardly ever get this close, especially during launch preparations.”

“We must have been there for at least an hour,” he says. “We passed through the launch pad’s first security checkpoint, then through the second checkpoint, where they took our name badges and secured them in a metal box at the gate—in case something goes wrong, they would know where to send the remains.”

Avitable and Niezrecki had been invited to NASA’s Kennedy Space Center in Cape Canaveral, Fla., to give several technical presentations to the Center’s engineering staff about their research at UMass Lowell. They discussed the new approaches they are developing to help monitor structural health and predict loads and global stress/strain, as well as gain a better understanding of the dynamics of vibrating and rotating structures.

One of Avitable’s current graduate students is James Ristow, a structural dynamics engineer from the Kennedy Space Center, who is completing his master’s degree in Mechanical Engineering on a NASA scholarship.

“The structural dynamics engineers at Kennedy insisted that James do his grad work at UMass Lowell because of the wide recognition of the programs we have developed at the Structural Dynamics and Acoustics Systems Lab,” says Avitable.

Business Education Goes Global
College of Management Adds New International Concentration

This fall, UMass Lowell’s College of Management will be training the next generation of leaders in global business. The college is introducing a new international business concentration that will be available starting next semester.

Like the other concentrations in the college, the new international business program will require students to earn 24 credits in their major. Their studies will include the same core courses as other concentrations, but international business students will also be required to study two semesters of a foreign language and have some international experience.

Courses specific to the new concentration include international finance, global marketing, global supply chain management and comparative management.

“What makes this concentration unique is the ‘study abroad’ or international experience requirement,” says Assoc. Dean Frank Andrews.

That experiential learning could include serving as a volunteer in another country, studying foreign language in the land where it originates or participating in an international internship, among other options, he explains. Students will work with their faculty advisers to ensure their plans meet the college’s requirement.

“A global point of view is not one easily come by in a classroom. What is critically important is that the international business students get some enhanced sense of cultural awareness and sensitivity to customs and cultural differences,” Andrews says, adding that such experiences may be best achieved outside of the classroom in a foreign country.
Commencement 2010
Saturday, May 29 at 9:30 a.m.
at the Tsongas Center at UMass Lowell

National Football League Commissioner Roger Goodell will address graduates at UMass Lowell’s commencement on Saturday, May 29 at 10 a.m. at the Tsongas Center at UMass Lowell. More than 2,000 students are expected to receive bachelor’s, master’s and doctoral degrees.

Goodell also will accept a posthumous Doctor of Humane Letters degree for his father, the late U.S. Sen. Charles Goodell, a Republican who was elected to Congress in 1959 and appointed to the Senate following the assassination of U.S. Sen. Robert F. Kennedy in 1968. He established a solid record on issues such as civil rights, the war on poverty and education.

Other Doctor of Humane Letters degree recipients include Doris Kearns Goodwin, presidential historian and Pulitzer Prize-winning author; Richard N. Goodwin, presidential speechwriter and adviser to John F. Kennedy, Lyndon B. Johnson and Robert Kennedy; Gloria Ladson-Billings, pedagogical philosopher, scholar and educational author; and Alan P. Lightman, physicist, novelist and author of international bestseller “Einstein’s Dreams.”

For more information, go to www.uml.edu

Commemoration 2010 Events Set

‘A Conversation with Dick and Doris’ to Kick Off Commencement Eve Gala

Pulitzer Prize-winning biographer Doris Kearns Goodwin and her husband, presidential speechwriter Richard N. Goodwin, will discuss some of their favorite topics including American politics, Presidential history and even baseball at a special Commencement Eve program on May 28.

“A Conversation with Dick and Doris” will be moderated by Chancellor Marty Meehan. The evening also includes a chance to meet commencement’s keynote speaker NFL Commissioner Roger S. Goodell, other honorary degree recipients, student award winners and distinguished alumni.

The conversation will begin at 4 p.m. at the UMass Lowell Inn & Conference Center, followed by a book signing at 5:30 p.m. “Team of Rivals: The Political Genius of Abraham Lincoln” by Kearns Goodwin and “Remembering America” by Richard Goodwin will be available.

“We are honored to have the Goodwins join us in celebrating this special time at UMass Lowell,” says Meehan. “Their contributions to American history and government are legendary; we look forward to sharing their stories and valuable insight with members of our University community.”

Doris Kearns Goodwin’s years as an assistant to Lyndon B. Johnson led to her first book, “Lyndon Johnson and the American Dream,” which became a bestseller. She followed up with the political bestseller, “The Fitzgeralds and the Kennedys,” which was made into an ABC miniseries.


Richard Goodwin was a clerk to Justice Felix Frankfurter. His experience as the lead investigator of the rigged television quiz shows was made into an Academy Award-nominated movie, “Quiz Show.” He served as assistant special counsel to President John F. Kennedy and as special assistant to President Lyndon B. Johnson.

After resigning from the White House, Goodwin directed Eugene McCarthy’s 1968 presidential campaign in New Hampshire and Wisconsin; he was also campaign adviser to Sen. Robert F. Kennedy. He has authored a number of the most memorable speeches of the last decades, including John F. Kennedy’s Latin American speeches, Lyndon B. Johnson’s Great Society and civil rights speeches; Robert Kennedy’s South African speech and Al Gore’s concession speech in 2000.

Admission to the Goodwin event is $25. For more information, please contact Elaine Dalton at (978) 934-3689 or go to www.uml.edu/commencementeve2010.