Assessment of Student Learning

Western Michigan University is the recipient of the 2008-09 American Humanics Program Excellence Award, a prestigious national award to institutions dedicated to preparing the next generation of nonprofit sector leaders. The WMU program was honored for “demonstrating best practices in all nonprofit leadership program areas, with strengths in the areas of institutional support, fundraising, nonprofit management curriculum, and community service,” by American Humanics. “The students did a great job with their presentation and responding to questions from the committee. And, I note that Janice Maatman as WMU campus director for the American Humanics program has done an excellent job in preparing the students for their participation at the Institute," said Dr. Barbara Liggett, WMU interim director of the School of Public Affairs and Administration. Founded in 1948, American Humanics is a national alliance of nearly 70 colleges and universities nationwide and more than 60 national nonprofit organizations. The American Humanics program at WMU is part of the undergraduate minor in nonprofit leadership, which is housed in and supported by the School of Public Affairs and Administration. The University also offers a Graduate Certificate in Nonprofit Leadership and Administration and a concentration in nonprofit leadership within the Master of Public Administration program. During the 2008-09 academic year, Campus Compact and the Fidelity Charitable Gift Fund granted WMU American Humanics students $15,000 to re-grant to local nonprofits and $3,000 for administrative costs. Students studied community needs, set priorities, issued requests for proposals, analyzed 23 proposals, completed site visits and held a Students4Giving Grant Celebration. The WMU group has received another $15,000 to distribute to local nonprofits in spring 2010. The student association also completed an additional four fundraising projects, including an Annual Letter Appeal and Santa’s Village, raising a total of $26,695. WMU students also served a total of 1,190 community-service hours planning and implementing seven community service projects, including Bowling for Kids’ Sake and a Head Start Christmas Party. For more information, contact Janice Maatman, director of nonprofit education programs in the School of Public Affairs and Administration, at janice.maatman@wmich.edu or (269) 387-8945.

College of Engineering and Applied Sciences

Items of Academic Interest

The Department of Civil and Construction Engineering (CCE) conducted a two-day national workshop on Finite Element Basics & Refined Bridge Structural Analysis to 11 engineers from the Michigan Department of Transportation (MDOT). Dr. Upul Attanayake, CCE assistant professor, and Dr. Haluk Aktan, CCE chair and professor, directed the event held at the Parkview Campus computer center in early March. The aim of the workshop was to train bridge engineers on fundamentals of finite element analysis and provide opportunity for hands on knowledge and experience to analyze complex bridge structural systems. This is the fourth workshop conducted by Drs. Attanayake and Aktan as a joint outreach activity of the department and the Center for Structural Durability to help professional engineers fulfill their continuing education requirements. The workshop was co-sponsored by the Michigan’s Local Technical Assistance Program (LTAP), National Association of County Engineers (NACE), American Council of Engineering Companies (ACEC) of Michigan, and Western Michigan University (WMU). Several people assisted in coordinating and organizing the workshop. Terry McNinch from Michigan’s LTAP was instrumental in dissemination of workshop information throughout the U.S. Ryan McGoff and Michael Romkema, graduate students, provided the technical support to the workshop participants who needed help with the software program used for bridge modeling and analysis. Omar Kanaan and Cheekian Teng.
student assistants, organized the workshop materials and folders. Nancy Landsberger, CCE office coordinator, and Estella Burdick, CCE office assistant, contributed to numerous tasks such as ordering food and refreshments for the participants.

About 50 students attended the fourth annual IME Night held earlier this semester at the CEAS Parkview Campus. For three hours, attendees learned about IME programs and projects, received advice on preparing for employment, and networked with representatives from area companies, faculty, alums, and students working at co-ops and internships. Slobodan Urdarevik, a faculty member in the Department of Industrial and Manufacturing Engineering (IME), coordinated the event, which included prizes, games, and a meal of specialty sandwich treats. The event was designed to introduce students who are undecided about their majors to the career possibilities offered by IME. IME offers four undergraduate programs: manufacturing engineering technology (MFT), engineering management technology (UEM), engineering design technology (EDT), and industrial and entrepreneurial engineering (IEE). Fred Sitkins, IME faculty and CEAS director of co-operative education emceed the event. Stryker’s Ryan Needham, an alumnus of the IME manufacturing program, presented an overview of his educational and career experiences. In addition, Glassmaster Controls’ Wayne Nicolen and Tenneco’s Mark Wallace shared information about their respective companies. Nicole Maggio, CEAS career advisor, coordinated the check in and collected names for the prizes. Several IME students participated in the event.

Student Accolades

WMU won second place last March at the 2010 American Society of Civil Engineers (ASCE) North Central Regional Conference (NCRC). WMU hosted the event, which included the concrete canoe and steel-bridge competitions and other “fun” contests. Nine schools from Michigan and Ohio participated. Kim Warners, a civil engineering senior, chaired the 2010 NCRC event. WMU’s 27-member canoe team won several awards for Sheriff, its entry in the contest’s four parts: formal presentation, technical paper, product display, and canoe races. WMU students Paul Pagano, Britney Richmond, Andy Peruski, and Alex Frazier won first place for the formal presentation. WMU’s fourth-place technical paper was prepared by Mike Romkema, Warners, Richmond, Peruski, and Pagano. Canoe paddlers were Pagano, Peruski, Richmond, where the award winners received commemorative plaques. The event was coordinated by Johanna Wells, CEAS office coordinator, and Tammy Bergman, CEAS office associate. The following list includes by department the program for each award-winning student, and the faculty member whom the student invited to the luncheon. If the student did not attend the luncheon, no faculty member was selected.

Department of Civil and Construction Engineering (CCE):

- Geoffrey S. Britton, Construction Engineering: Dr. Upul Attanayake
- Bradley T. Gerbasich, Civil Engineering: Dr. Yufeng Hu

Jason McCubbin, Dan Gusestella, Lindsay Mukans, Allison Doty, Allison Porrett, and Nicole Clement. The WMU canoe display, which won third place in the “Western” theme product-display was designed and constructed by several students. Display coordinators included John Hannich, for the canoe stand and display; Mukens, for poster and table-top displays; and Mike Wesolski, for the canoe painting. According to Pagano, WMU’s canoe project leader, the 20-foot-long Sheriff weighed 260 pounds and held up to 4 paddlers for the two- and four-person endurance and sprint events. Pagano said the canoe had a space-frame structural rib design and “green” sustainable concrete mix design. “The space-frame is similar to the old birch bark and animal skin canoe,” he said. “The ribs carry the load of the canoe and a lightweight skin keeps the water out.” The concrete used recycled glass and crumb rubber (from shredded tires) as aggregates in place of virgin natural materials. Pagano acknowledged “the hard work and dedication by everyone on our team.” The faculty advisor for WMU’s teams is Dr. Osama Abudayyeh, associate dean for the CEAS.

Dr. Tony Vizzini, dean of the CEAS, honored the top student in each of the 16 CEAS undergraduate programs. The students were selected based on their having the highest grade point average (GPA) in their respective programs. Each student invited a faculty member of his or her choice to the luncheon ceremony.
The 2010 CEAS dean’s scholars and their faculty guests pose at the CEAS Dean’s luncheon. Photo by Laura Decker, CEAS.

Upcoming Events

The Formula SAE team is preparing a new vehicle for the 2010 International Annual Formula SAE Michigan event at Michigan International Speedway in Brooklyn, Mich., from May 12 to May 15. According to Geoff Van Gemert, Formula SAE project manager and suspension team leader, the team is busy completing the components of the team’s 2010 vehicle in preparation for the race. Other members of the FSAE team include Jeff Terry, president; Zach Tuyls, vice president; Chris Harman, multimedia, secretary & webmaster; Antonio Giraldo, treasurer; Chris Briolat, drivetrain team leader; Ernesto Matos, engine team leader; and Charlie Spitzley, frame and body team leader. Dr. Claudia Fajardo, MAE assistant professor, is the Formula SAE faculty advisor. Those who want to support the WMU Bronco SAE team are encouraged to attend on Fri., May 14 and Sat., May 15. The Formula SAE team will be holding an unveiling event for the 2010 Formula SAE vehicle after at the CEAS Parkview Campus some time after the race.

Assessment of Student Learning

An eight-member WMU team competed in the steel-bridge competition at the 2010 American Society of Civil Engineers (ASCE) North Central Regional Conference (NCRC) held in March at WMU’s Parkview Campus. Seven teams from Michigan and Ohio colleges participated in the competition sponsored by the American Institute of Steel Construction (AISC) and the ASCE. For the competition, college students work together to design, fabricate, build, and test a scale model steel bridge. This year’s bridge requirements included being a maximum 21-feet long, standing no taller than 33 inches; having the capability to hold 2,500 pounds, and being structured easy assembly from pieces no longer than three-feet six-inches long by six-inches square. Other bridge requirements involved aesthetics and a limitation on its ability to bend. For the competition, student teams built the bridge models under simulated field conditions, and then the bridge is load tested. The winning bridge is based on bridge assembly time, number of people it takes to assemble the bridge, weight of the bridge, and bridge deflection. “Each of these factors has a cost associated with it and the lowest cost wins,” said David Schmidt, a civil engineering senior who led the WMU team. The team members sported “Steel Broncos” logos on their shirts with the motto, “We just don’t do concrete” - a reference to WMU’s concrete canoe team. Six

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