

Workforce Innovation II Awards

University of West Florida

The University of West Florida was awarded a Workforce Innovation II grant for \$302,727 to be matched with a \$1,880,519 investment. The grant will facilitate a two-part program in the School of Science and Engineering consisting of the development of an Executive Master of Science degree in Computer Science-Software Engineering with the option of earning a Certificate of Medical Informatics; and, in collaboration with UWF'S School of Allied Health and Life Sciences, delivery of educational outreach to high school guidance counselors on information technology career options and requirements.

Executive Master of Science in Computer Science – Software Engineering

After listening to input from Northwest Florida's business community and reviewing occupational analyses commissioned by Florida's Great Northwest, UWF launched its first software engineering executive cohort in February 2009. The program kicked off with a two-day residency before going online for the remaining 10 months. Students are required to meet in person only once more for a one-day capstone project orientation midway through the program.

Associate Vice President for Research and Dean of Graduate Studies, Dr. Richard Podemski, is quick to point out the level of student engagement in UWF's online courses. "Many people mistakenly believe that online classes are impersonal. Online classes at UWF can be far more interactive than large face-to-face classes," Podemski explains. The university's Academic Technology Center won the Sloan Consortium's Online Teaching and Learning Award for Excellence in Faculty Development for Online Teaching. Center director Pamela Northrup works closely with faculty to adapt curriculum for virtual classes.

Through unique online interactions and group projects, the cohort group formed a tight bond. The first class, which included 25 students, organized a reception prior to the graduation in December 2009. The students wanted the opportunity to celebrate their success as well as to thank the faculty, staff and Florida's Great Northwest for making the new program possible. The first year graduates, whose tuition was waived as match for the grant funding, established a scholarship to assist the program's future students. Impressively, a few of the graduates will return to UWF this spring as teachers.

To participate in the intensive program, applicants must have buy in from their employers. Students are permitted to work only 20 hours per week while taking classes. Companies sponsoring students in the first class include SAIC, Techsoft, Computer Sciences Corporation, McKesson Provider Technologies, Booz Allen Hamilton, Eglin Air Force Base and the Naval Hospital. Each student is required to have a mentor throughout the program. While many students easily find a mentor in the workplace, faculty and classmates assist those who are self-employed or unemployed.

"We ask the companies to provide a mentor and release time for the students," says Podemski. "They receive an immediate return on investment because the projects are designed to benefit the company, and the students gain skills that can be directly implemented."

"The thing that stood out for me was the immediate relevance of what I was learning to my current job," explains Meg Kelly, a McKesson Provider Technologies senior program analyst at Baptist Hospital in Pensacola. "Within weeks I saw a return on what I was learning, and my employer noticed too."

Kelly, who was mentored by the CIO of Baptist Hospital, says the executive program was the most challenging experience of her life. "It was almost like

an immersion into a different language,” states Kelly on the program’s intensity, “but I would definitely recommend it.”

“Many of the university’s curriculum revisions in recent years are directly attributable to the workforce and education studies commissioned by Florida’s Great Northwest,” says Podemski of the WIRED-funded analyses. “We want to meet the regional workforce needs, and Florida’s Great Northwest has provided the data we need to make focused, data-driven decisions.”

School of Allied Health and Life Sciences High School Outreach

Dr. Melanie Sutton, Associate Professor in the School of Allied Health and Life Sciences at the University of West Florida, is utilizing WIRED funds to educate high school guidance counselors on educational and career opportunities in the emerging field of medical informatics. Medical informatics involves the use of computers to address various problems in medicine and healthcare, including e-prescribing, disease registries, chronic disease management, e-research and more.

UWF hosted its first medical informatics workshop in November 2009 in Pensacola which included a tour of the clinical laboratory at Sacred Heart. “We saw a lot of enthusiasm in the attendees, and they all wanted to bring the information to others at their schools,” says Sutton. “As a follow up, we are taking this information directly to the schools through in-person visits and distribution of e-books, posters and presentations.”

UWF continues reaching out to schools in Northwest Florida and has completed four additional workshops, hosting 20 middle and high school guidance counselors, teachers and district administrators. Attendees included representatives from Escambia, Santa Rosa, Okaloosa, Walton and Wakulla Counties. Two teachers from Wakulla High School traveled more than 200 miles to attend a workshop in Pensacola and bring back medical informatics career information to the students in their Project Lead the Way Medical Academy, another successful WIRED-funded program.

Stephanie Reedy, academic advisor and outreach coordinator for the medical informatics program at UWF, has also developed a web portal for use by high school students exploring careers in medical informatics, with the goal of helping to prepare the future workforce for the future of healthcare.

“We also currently offer continuing education classes for medical professionals who are not comfortable using computers,” Sutton explains. “The next generation will be better prepared as soon as they enter the workforce.”