FY 2009 Awards

Author(s)	Baier, Marjorie, Department of Primary Care and Health Systems Nursing
Title	Immediate Feedback Assessment Technique (IF AT) Answer Sheets
Award	$405
Abstract	I am requesting $405 to purchase a supply of 2000 Immediate Feedback Assessment Technique (IF AT) answer sheets in 8 answer versions which would suffice for approximately 10 courses. I will use these forms to implement the active learning strategy, team-based learning, in Nursing 472 Undergraduate Nursing Research in Fall 2008. The IT AF forms provide immediate feedback to students as well as allowing for partial credit for "proximate" knowledge. The IF AT is a multiple-choice answer sheet. Students scrape off an opaque, waxy coating that covers an answer space to record their answer. If a star is printed beneath the scratch-off, the student receives instant feedback that a correct choice was made; the absence of a symbol provides instantaneous feedback that an incorrect choice was made. However, rather than simply exiting the question, the student reviews the remaining response options, continues to respond until the correct answer is discovered (a self-correction procedure) and exits each question with the correct answer. (Brosvic & Epstein, 2007) This system may apply well to other undergraduate nursing courses.

Author(s)	Bolander, Jennifer, Department of Curriculum and Instruction Fahsl, Alison, Department of Curriculum and Instruction O'Donnell, Barbara, Department of Curriculum and Instruction Puchner, Laurel, Department of Educational Leadership and Taylor, Ann, Department of Curriculum and Instruction
Title	Teaching and Learning in a Diverse World: Inquiring and Continuing the Dialogue
Award	$5,870
Abstract	In order to continue and expand the success of our 2008 one-day annual inquiry conference (Teaching and Learning in a Diverse World) undergraduate, graduate, and faculty will share research in education, and provide workshops for attendees on topics related to diversity and inquiry. Our proposal is to fund an expanded 2009 conference which would enable us to begin the development phase of this successfully initiated conference. We propose growth and development in the following areas: 1) Increasing undergraduate participation 2) Further development enhancement of undergraduate research projects 3) Utilizing capacities and developing relationships at SIUE 4) Building a pool of experts and speakers 5) Increase SIUE presence in the region as a center for diversity and educational inquiry 6) Increase our connections to local and national organizations Conference participants will be 400 undergraduate students in 5 different programs from three different departments. The goals of the project are to further the School of Education's goal of developing teachers who become life-long learners, researchers, and inquirers, and to enhance teacher

	education student's understanding of diversity. Three types of events will be scheduled: keynote speaker and breakout workshops related to the inquiry and diversity themes, and undergraduate and graduate student project sharing.

Author(s)	Bradley, Stefan, Department of Historical Studies
Title	Black Freedom Movement Domestic Study
Award	$6,782
Abstract	While SIUe students have the chance to participate in a study abroad program, there are few programs that allow them to study domestically while traveling. As part of my effort to enhance the educational experiences of undergraduates through active learning; to improve an existing SIUe history course; to advertise for the Black Studies Program; and, to aid in the retention of students from underrepresented groups, I would like to offer ten students from the Student Opportunities for Academic Results (SOAR) office and my Black Freedom Movement (HIST 340) course the opportunity to travel to the history during the first summer session of 2009. We will do so by first following the trail of the Freedom Riders of 1961, and secondly by visiting important civil rights sites along the way. The Freedom Riders (young black and white students as well as older civil rights activists) fearlessly faced down racism on their voyage from Washington DC to New Orleans, and at each stop they risked their lives. Although the students will begin and end their journey in Edwardsville, they will capture the images and feel of the movement. The students will gain a greater understanding of the danger those protesters of the 1960s encountered when they see what the Freedom Riders saw and learn what the riders and other activists experienced. Along the way, the students will visit civil rights libraries, museums, sites, centers and take a tour. In doing so, they will be able to use their physical senses to understand and navigate the history. After returning, students will submit a 10-12 page paper and create an exhibit that they will display for the SIUe community in the fall of 2009.

Author(s)	Córdova, Jr. Ralph, Department of Curriculum and Instruction and Breck, Susan, Department of Curriculum and Instruction
Title	Digital Video Technology as Reflection and Inquiry Tools in the Teacher Preparation Years: Bridging complementary technological approaches between the 19th and 21st Centuries
Award	$10,150
Abstract	The School of Education's Undergraduate Teacher Preparation Program seeks an EUE grant to study the impact of, and to further develop, its senior capstone project, the Lesson Study on undergraduate learning. Lesson Study and its series of Research Lessons, developed by teacher candidates' two semesters within their senior year, provides these future teachers with opportunities to develop inquiring stances that enable them to not solely learn to teach but to teach from what they have learned. In doing so, candidates become Inquirer-Professionals. By paying attention to the Lesson Study's impact on candidates' learning during pre-service year

	and into their in-service year, this project will generate knowledge that describes whether our candidates further build on the inquiry and reflection dispositions learned during Lesson Study pre-service years to make decisions into their in-service year. The role that digital video archiving and analysis technology plays as a reflection and analysis tool to facilitate the Lesson Study process of inquiry learning will be studied as a meditating process that enhances undergraduate learning. In doing so, this project brings 19th century technology (Lesson Study and Teacher Preparation) into the 21st century with the use of state of the art digital video technologies. In doing so, due to the dissemination efforts of the proposed project our Lesson Study -- a locally realized accomplishment -- has national relevance to teacher education through the innovative use of technology. Knowledge generated from this project will inform our undergraduate program's senior capstone, allowing for informed modifications, by developing an empirical base on the Lesson Study's efficacy and impact on our future teachers' professional learning.

Author(s)	Cross, Brad, Department of Civil Engineering and Morgan, Susan, Department of Civil Engineering
Title	Proposal to Develop an SIUE Civil Engineering Internship Program in Conjunction with the Senior Assignment
Award	$6,875
Abstract	The Department of Civil Engineering has for many years required all senior students to participate in a final design project class, CE 493. This class is also the department's senior assignment. Approximately 40 students graduate with a bachelor's degree in Civil Engineering each year. The main emphasis in CE 493 has been to provide students with challenging projects, similar to those they would experience in the engineering office environment. It has been difficult, however, to fully simulate the design experience, without having the students participate directly in real world design offices outside the university. The next logical step that can be taken to make this project more rewarding for the students is to give them a substantial experience in a design office outside the classroom. This proposal will describe an improvement to the class that will permit students to spend three hours per week working alongside practicing engineers on real world projects. Departmental assessment will be enhanced by interviewing internship providers and having students assemble outcome portfolios as part of their design report to be evaluated by all department faculty.

Author(s)	Essner Jr., Richard, Department of Biological Sciences and Minchin, Peter, Department of Biological Sciences
Title	Development of a Biology Curriculum for Certification in Wildlife Biology
Award	$5,805
Abstract	The Department of Biological Sciences has experienced an unprecedented rise in enrollment over the last five years. Most of the increase has occurred in health-related specializations. In response to the increased demand, we have made a number of corresponding changes to the

	curriculum in order to accommodate the needs of these students. In contrast, the numbers of students specializing in the Ecology, Evolution, and Environment (EEE) area has remained relatively flat during this period and has received comparatively little attention. In examining ways that we might improve our existing EEE curriculum, we determined that simply offering an additional course in wildlife management and expanding an existing course in conservation biology would dramatically improve our program. These changes to the curriculum will enable our students, for the first time, to complete all of the coursework necessary to receive certification in wildlife biology through The Wildlife Society (the leading society for wildlife professionals). Senior level courses in wildlife population management and conservation biology would simultaneously meet the needs of students interested in becoming wildlife biologists, help mitigate a shortage of upper level courses in our program, and offer our students a significant advantage (i.e. certification) when seeking employment. Conversations with wildlife biologists from nearby parks, refuges, and natural areas, reiterate the need for these courses in our curriculum. In addition to developing these two courses, we seek to develop a recommended course of study to assist students with planning coursework. Lastly, we seek to create a website that will be used to inform students about the certification program.

Author(s)	Gordon, Chris, Department of Construction Lopez, Carla, Department of Construction
Title	
Award	$14,287
Abstract	Construction companies are increasingly facing global and international influences on their projects. These range from managing labor and materials from other countries, focusing on the global effects of facilities and construction projects, and growing to markets in different companies. This motivates the proposed creation of a new technical elective in the Department of Construction, entitled International Construction. This course, to be offered in Spring 2009, consists of 12 hours of seminars in topics related to international construction, followed by 30 hours of intensive travel-study and 3 hours of dissemination to students and industry. We have received strong and immediate interest from a St. Louis-based international construction company to expose students to their office and projects in and around Irapuato, Mexico. We are requesting funds from EUE to help initiate the course. We plan to seek industry funds from our supportive local industry to continue the course in the future. We anticipate that this course and its associated dissemination modules will provide a pronounced impact to the construction department student body, encouraging them to pursue interests and opportunities related to the numerous international and global influences on the industry.

Author(s)	Gu, Keqin, Department of Mechanical & Industrial Engineering and Karacal, Cem, Department of Mechanical & Industrial Engineering
Title	Co-operative Capstone Design with Henan University of Science and Technology
Award	$11,500

Abstract	In a globalized world, engineering students need to learn communicating and working with their colleagues in other cultures. This proposal is to fund a program that will 11 take a group of students to conduct capstone design in Henan University of Science and Technology in the summer term. They will also tour the Chinese operations of US companies, as well as tour Chinese manufacturers. The program will also take students to visit some well-known historic and cultural sites. Through this program, the students will learn to work with people of different culture, appreciate a different educational system and engineering practice, appreciate different culture, and learn beginning Chinese. The students will gain an invaluable experience and will start out in a competitive job market. The matching fund wi11 be collected from the participating students. The cooperating institution is also funding the project by providing cultural experience program and a deep discount to the student's accommodation. We are also seeking industrial support for the program.

Author(s)	Hanson, Laura, Department of Theater and Dance
Title	The Dramatic Experience: Live Professional Theatre
Award	$9,541
Abstract	This project would supply professional theatre tickets to the members of the seven New Freshman Seminar sections of THEA 111: "The Dramatic experience," scheduled for fall 2008. This course introduces students to the nature of live theatre, enabling them to become more astute and appreciative audience members, to increase aesthetic awareness of theatre as an art form, and appreciate the role of the arts in human history. Since theatre is a live performing art form, it is essential that those studying it experience theatre firsthand. Professional theatre is of an entirely different caliber than those these students may have seen on the high school or even college level. Members of the class will discuss and write critiques of productions viewed. Since many students come from smaller communities without access to the arts, especially live professional theatre, this program offers an opportunity to enrich their college experience and introduce them to the cultural resources of the St. Louis area. These funds would finance theatre tickets for the students in these sections of New Freshman Seminar: THEA 111.

Author(s)	Hayden Foster, Carly, Department of Political Science
Title	Women and the Legislative Process
Award	$5,276
Abstract	I plan to develop an informative new course for undergraduate students at SIUE, "Women and the Legislative Process," POLS 449. I plan to model this course on similar, successful courses offered at other mid-western universities. Women and the Legislative Process will combine contemporary academic research on women and legislatures with insights and commentary provided by various guest speakers. I am requesting EUE program assistance in providing one month's salary. This will allow me the time to prepare course material, and to develop relationships with local and regional political actors- legislators, legislative assistants, lobbyists, political activists and local politicians- so that I might convince them to visit my class. I am also requesting EUE assistance so that I may take my undergraduate students on a fieldtrip to the state capital in Springfield.

	There we will demystify the legislative process by meeting with actors in the legislative process, and experience the physical space where lawmaking takes place. The opportunity to observe and interact with politically active and successful women can be a transformative educational experience, inspiring civic engagement, life-long learning, and self development. With the help of our guest speakers, students in this course will analyze factors influencing women's under-representation in elective office and examine roles that women have played in the legislative process. Students will be assigned to research a social problem, and draft their own legislative response to the problem that they identify. My students will practice both written and oral communication skills as they write their Bill, then advocate its adoption during an in-class presentation. This course will be cross-listed between Political Science and Women's Studies, and so will represent success in the EUE program goal of developing interdisciplinary curriculum.

Author(s)	Herndon, Christopher, Department of Pharmacy Practice
Title	Putting narcotics into perspective – a visit to Covidien laboratories
Award	$600
Abstract	Within the pain and palliative care elective offered at the School of Pharmacy, students are exposed to all aspects of this area of practice. Opioids (narcotic analgesics) are a mainstay of this area of practice, as well as the most frequently prescribed medication in the United States (US). Covidian Pharmaceuticals (previously Malinkrodt) provides a lectureship and tour of their heroin processing plant in North St. Louis at no cost to participants. This past year the students in this class were provided an in depth lecture of the geopolitical ramifications of controlled heroin processing for analgesic production, and its effects on the world economy. Following this lecture, students were able to tour the plant which is the largest importer of medicinal use heroin in the world. The results of the this exposure are presumed to be a better understanding by the student pharmacist of the prescriptions they dispense and how these medications evolve from the poppy fields of Afghanistan and India to the pharmacy shelves here in the US. This year we will administer a post-test to the students participating in this activity to assess changes in perception regarding heroin-derived opioid analgesics. The purpose of this grant proposal is to request the estimated $600.00 in transportation costs to provide busing from the School of Pharmacy to the chemical plant in north St. Louis.

Author(s)	Hershberger, Edmund, Department of Management & Marketing
Title	2009 AMA International Collegiate Conference Case Competition and Exhibit
Award	$6,420
Abstract	Spring 2009 semester will be the fourth year for the SIUE Marketing Association's participation in a marketing case competition sponsored by the American Marketing Association, an internationally recognized organization of marketing practitioners, educators and students. The case competition tasks each participating university with the challenge of solving the sponsoring firm's marketing problem. Past clients have included high profile clients such as Krispy Kreme, Michelin, Kwik Trip and the City

	of New Orleans. At the International Collegiate Conference, the top eight case submissions present their marketing solution to the client as well as a panel of judges to be assessed and winners selected. At the 2008 Conference, the student Case Competition team was selected as a top eight finalist, giving the students a boost of confidence, and motivating them to work even harder in preparation for the 2009 Conference. In addition to the case competition, we will also be participating for the third year in the AMA Exhibit Session, a trade show featuring AMA collegiate chapters from around the world. Our representation at this exhibit session will provide immeasurable exposure for the school and the university.

Author(s)	Hill, Roger, Department of Physics
Title	Laboratory Manual for College Physics
Award	$7,708
Abstract	My project is to rewrite the laboratory manual for our College Physics course (Physics 206AB, to be renumbered 131AB). This course is a one-year algebra-based survey of physics taken by biology, pre-medical, pre-dental, and pre-pharmacy students, and occasionally by students in other disciplines. During 2007 we had approximately 265 students staging the two-semester course sequence. The course includes a laboratory with 24 experiments on topics in mechanics, heat, waves, electricity, light, and modern physics, using a laboratory manual which covers both semesters. The first edition of the manual was written by me in 1986, and the manual has undergone a number of revisions, mostly by me. The most recent version (eighth edition, 2004) is desperately in need of revision to reflect equipment changes (e.g. new digital oscilloscopes) and other recent innovations such as the increased use of computers in data collection and the use of Microsoft Excel for data analysis. The revision would also include pedagogical improvements in the procedures, corrections and clarifications that have been suggested by students and faculty, and the replacement of some experiments by completely new ones. In addition, the entire manual will be converted from the previous TeX format to Microsoft Word format for easier revision by others in the future. I am requesting a month's support in Summer 2008 to write the revised manual.

Author(s)	Hume, Susan, Department of Geography
Title	Diversifying Undergraduate Majors in Geography: A Student Investigation
Award	$5,026
Abstract	This project seeks to promote excellence in undergraduate education in two distinctly different, but integrated ways. The first is to provide students enrolled in the fall semester 2008 GEOG450 Qualitative Research Methods course with the necessary digital voice recording equipment to conduct, transcribe, and analyze qualitative data from interviews and focus groups for an original research project. The focus of the class project is for student researchers to identify favors that contribute to undergraduates' choices of major and uncover the reasons why students choose or do not choose to major in geography. The second way this project seeks to promote excellence in undergraduate education is to provide the University community with research and subsequent recommendations for improving recruitment strategies of diverse undergraduate students. The Project Director will conduct an extensive and refined analysis of the interview and

	focus group data collected by the student researchers and synthesize these findings with open- and close-ended questionnaire data also collected as part of the students' coursework. A final report will place these research findings within the larger context of the scholarly literature on strategies for diversifying student enrollment, and offer concrete recommendations of how the Department of Geography, the College of Arts and Sciences, and the University can improve undergraduate recruitment, particularly from underrepresented groups and specifically in geography. Inclusion of more diverse voices would further enrich the classroom experience for all undergraduate students enrolled in our geography courses.

Author(s)	Jarosz, Krzysztof, Department of Mathematics and Statistics
Title	Scientific Notebook
Award	$1,095
Abstract	We propose to purchase 50 copies of 1-semester student license of Scientific Notebook. That computer program will be used by students to prepare Senior Project papers and Senior Project presentations. It will also be used by students in other upper level math classes.

Author(s)	Liebl, Faith, Department of Biological Sciences
Title	Using Hypothesis-Driven Laboratories to Improve Student Learning in Cell Biology
Award	$12,319
Abstract	Cell and Molecular Biology (BIOL 319) is a course that examines how cells function on a molecular level. The course employs a two hour laboratory exercise each week to reinforce concepts presented in lecture. My goals for the laboratory portion of the course are to: 1) convey how science is discovered, 2) develop the student's ability to analyze and integrate new information, and 3) enhance his/her critical thinking and writing skills. Therefore, the purpose of this proposal is to implement a multi-week laboratory investigation that will demonstrate the relationship between living organisms and their constituent molecules by examining cellular behavior in live animals. This project will reinforce the scientific process, which emphasizes the application of concepts and the development of intuition, critical thinking, and analysis skills. To assess whether the revised laboratory curriculum enhances student retention, critical thinking, and writing skills I will utilize three approaches including surveys, pre- and post- tests, and student grades. It is expected that, as a result of this project, students will positively evaluate the lab, better understand both the lecture and lab material, and develop writing and critical thinking skills.

Author(s)	Lin, Chiang, Department of Civil Engineering and Vaughn, Brent, Department of Civil Engineering
Title	Developing a Web-based Data Acquisition System
Award	$9,000
Abstract	Civil Engineering (CE) undergraduate students are required to take a total of four laboratory courses, CE207L, 330L, 354L and 415L, in the SIUE CE curriculum. A computerized data acquisition system, Gentest, has been used in all these four labs. Gentest has the capability to collect

	multichannel data from one to eight different transducers and automatically upload the data to a database for easy downloading through the CE lab web site. Gentest was developed beginning in about 1995 as a conventional Windows based application. Therefore, it cannot utilize some useful features, such as remote access and platform independence which could be provided by more flexible internet technology. More importantly, the maintenance on this VB-based software has demanded a considerable amount of time. Although it can rely on internet connectivity to transport the program to each local workstation, Gentest has to be re-installed or upgraded on each local workstation when a correction or modification is made and whenever the computer workstations are updated. One possible solution is to develop a browser-based version of Gentest in Java, a platform independent language, which can be closely integrated with internet operation. Anticipated benefits include: (1) the internet assisted laboratory learning environment can be completed with the integration of Java-based Gentest allowing students and instructors to implement other features, such as recording and viewing students' performance in the lab, which are considered difficult to perform at the current time; (2) it would drastically reduce the time required for maintenance; (3) the cost for routine upgrading of workstations can be significantly reduced; (4) because the redesigned Gentest application would become a part of internet web pages, remote monitoring and controlling experiments can be achieved easily; (5) it would be much easier to keep Gentest up-to-date since various tools are continuing to be developed by other Java users.

Author(s)	Kaplan, David, Department of Physics and Lindell ,Rebecca, Department of Physics
Title	Development and Assessment of Waves Physics Course Curriculum and Learning Materials
Award	$10,273
Abstract	In the structure of our universe and throughout an extremely broad range of physical phenomena, ranging from supernova explosions to radio communication to quantum effects, wave motion is pervasive. For this reason, success in intermediate and upper-division modern physics and engineering courses now depends on a solid understanding of wave physics concepts. Reflecting this, the need for a dedicated early course on wave physics has been nationally recognized, and several prestigious universities have already instituted such courses. At SIUE, the University Curriculum Council has recently approved the creation of a new course required for physics majors, Physics 251 (Wave Physics), to be offered regularly beginning in Spring, 2009. Astonishingly, there is no suitable text for Physics 251 on the market! Nor is an appropriate curriculum available. This proposal requests funds to develop and evaluate extensive curricular modules for this course, including modern applications from diverse areas of science and interdisciplinary applications. With this, SIUE will continue to maintain its presence at the forefront of Physics Education.

Author(s)	Korak, John, Department of Music
Title	Crispian Steel-Perkins Masterclass
Award	$3,000

Abstract	The study of Renaissance, Baroque and early Viennese Classical music on period instruments is crucial to the understanding of the music, history, and performance practice of these eras. From the beginning of the 20th century there has been a growing demand for 'authentic' renditions of historical music. Today, numerous professional, collegiate, and amateur ensembles exist that either in whole or in part exist to propagate historical performance practices in order to more fully understand what this music was intended to communicate. At SIUE, we have an ensemble of this nature. The Natural Trumpet Ensemble is comprised of students from the SIUE Trumpet Studio, and performs music from these earlier eras. My proposal is to bring English trumpeter Crispian Steele-Perkins to campus for a masterclass and recital. Crispian is the preeminent trumpeter in the world on period instruments. His recordings have garnered tremendous acclaim, and his publications are used globally in institutions of higher learning to further the understanding and development of trumpet literature, instrument design and construction, and performance practice techniques. His visit would impart significant insights into music of the 16th-19th centuries-insights that will greatly enhance academic knowledge, historical awareness, and pedagogical skills in our students and myself as I continue to work with this group of students in the semesters to come.

09-22

Author(s)	Pelekanos, George, Department of Mathematics & Statistics
Title	Calculus II and III Lab Manuals in Mathematica 6.0
Award	$2,800
Abstract	Since technology is now readily available, the focus of introductory mathematics courses, including Calculus has shifted from mere number crunching to mathematical thinking and reasoning. This proposal requests funds to help defray the costs involved in developing a computer laboratory manual for MATH 152 (Calculus II) and MATH 250 (Calculus III). Each manual will consist of computer simulation activities that are meant to reinforce mathematical concepts. Each activity will be accompanied by a detailed tutorial on MATHEMATICA 6.0, the mathematical software that is currently being used for these courses. These manuals will be made available online and hence they will not add an extra cost to the students. The author has successfully completed lab manuals for the above courses through a EUE-2005 grant; however these manuals were designed for Mathematica 5.2. Mathematica 6.0 is a major upgrade over Mathematics 5.2 and hence the old labs not only do not function properly under the current Mathematica version but they don't take into advantage the new features of Mathematica 6.0.

Author(s)	Rambsy II, Howard, Department of English Language & Literature- Black Studies Program
Title	The Digital Movement2.0: Expanding African American Techno-Literary Involvement
Award	$5,635
Abstract	Despite the increasing number of academic activities devoted to digital

	humanities, relatively few of these initiatives concentrate on African American literary art. The proposed project, The Digital Movement2.0, seeks to address the needs of undergraduates interested in African American literature and Black Studies by expanding their reading and composition capabilities through the use of digital technologies. The project will involve two main activities: 1) E-book reading-where students cover select writings utilizing electronic books and 2) Visual-Literary design-where students compose fliers, postcards, and posters based on African American literature. The project will encourage students to capitalize on their homegrown digital know-how and interests, and at the same time, the project will expose students to distinct reading and composition practices in fields of African American cultural expression. Ultimately, The Digital Movement2.0 will assist in expanding the techno-literary capabilities of undergraduates and provide the Black Studies Program and the Department of English with blueprints for significantly enhancing their course offerings pertaining to African American literary art.

Author(s)	Rigdon, Steven, Department of Mathematics & Statistics and Kniepkamp, Barbara, Department of Mathematics & Statistics
Title	Testing Center for Mathematics and Statistics
Award	$12,700
Abstract	Most books in mathematics and statistics now come with on-line testing/quizzinq/homework software. For the books we use in MATH 120, 125, and all three semesters of calculus, the square is called MathXL. Currently we do not have the capability to use this technology to the fullest extent. We would like to have a math testing center where students can come and sign in and take tests or quizzes in a proctored environment. This will allow us to continue the use of readiness skills tests for MATH 120 and 125 that was begun in Fall 2006, and to use the quizzing software in MATH 120, 125, and 150, and possibly other courses such as MATH 112a and 112b.

Author(s)	Rossow, Mark, Department of Civil Engineering
Title	Creating an outline course version of CE 240 based on worked examples
Award	$7,190
Abstract	In a 2005 EUE project, the project director developed course materials (based on a recent development in cognitive science) that allowed students in a key engineering class, CE 240 (Statics) to learn by studying worked examples, rather than by following the traditional approach of solving many homework problems. The project was successful, and every semester since 2005, CE 240 has been taught by the worked-example approach. The goal of the present proposal is to extend the worked-example approach to an online version of CE 240. The development of such a course would offer several benefits, among them 1) providing a convenience for students, especially non-traditional students who have inflexible schedules; 2) developing expertise that would help the Civil Engineering Department develop additional online courses in the future; and 3) gaining recognition for the Department as an innovator in engineering education- very few universities offer a statics course online, and no other university has a statics course that relies on studying worked

	examples rather than on working homework problems.

Author(s)	Santanello, Cathy, Department of Pharmaceutical Sciences Poirier, Terri, Department of Pharmacy Practice and Nieto, Marcelo, Department of Pharmaceutical Sciences
Title	International Experiential Component in an Education Concentration for PharmD Students
Award	$8,560
Abstract	The vision of the SIUE School of Pharmacy is to provide excellence in pharmaceutical education and to inculcate a spirit of respect for diversity and good citizenship. Our students participate in various pharmacy practice experiences including seven five-week Advanced Pharmacy Practice Experiences (APPEs) during the fourth year of the Pharmacy program that provide students with the opportunity to develop and apply skills to real world settings. The authors have developed an Education Track in the School of Pharmacy that includes an Education APPE. One week of this APPE will have an international component to enhance students' development in the areas of cultural competence and pedagogy. In cooperation with the University of Costa Rica's School of Pharmacy, we are planning on taking the ten 4th year students in this track to Costa Rica with the purpose of: delivering learning units in various areas of pharmacy, facilitating pedagogical faculty development workshops, providing general health care seminars, and gaining experience developing assessment tools to evaluate the learning outcomes of the aforementioned activities. We believe that this international experience will help the students develop a cultural awareness of pharmacy education outside of the U.S., implement instructional design and strategies while gaining confidence in their teaching abilities, share their expertise in pharmacy and education with faculty and students in another country, and provide community service to international citizens through health promotion and medication use presentations.

Author(s)	Schapman Marc, Department of Music
Title	Vocal Artist Masterclass Series
Award	$3,150
Abstract	The Vocal Artist Masterclass Series has multiple objectives. First, to allow undergraduate voice students to work with renowned and highly trained artists in the field of vocal study. Students will participate in a masterclass setting in which visiting artists will work one-on-one with designated students on matters of technique, musical style, diction, performance practice and dramatic interpretation. Second, the series will allow undergraduates to engage in question and answer sessions with the artists, thereby gaining valuable career knowledge. Third, undergraduates will network with prominent teachers from distinguished music graduate schools, creating the potential result of SIUE music students being admitted into prominent graduate programs. Finally, the series has outstanding potential for SIUE music recruitment. In the competitive field of music, this could indeed be a deciding factor for a great vocal talent to attend SIUE. Potential artist candidates for The Vocal Artist Masterclass Series include: American soprano Christine Brewer, master teacher

	Costanza Cuccaro, vocal coach Gary Arvin, and American tenor Eric Cutler. Funds will help cover the costs of the artist fee, air travel, meals, and auto transportation to and from the airport.

Author(s)	Shang, Ying, Department of Electrical and Computer Engineering and Muren, Steve, Department of Electrical and Computer Engineering
Title	Lab Development of Programmable Logic Controllers
Award	$5,906
Abstract	The goal of this project is to develop a programmable logic controller (PLC) laboratory in the Department of Electrical and Computer Engineering. Programmable logic controllers are industrial control devices that manage the production lines in manufacturing companies, such as Anheuser-Busch. With the funding from the EUE program, we will be able to set up four PLC stations in the Control Systems Laboratory of the ECE department, as well as develop the PLC lab assignment manuals which will cover PLC fundamental theory, software simulation, and PLC design methods. Both project directors will develop the PLC lab collaboratively and integrate different PLC assignments into their individual courses to improve students' hands-on experience. Due to high demand for college graduates with prior PLC experience in St. Louis metropolitan area, this project will give students an early exposure to PLC equipment and increase their competitive ability in the engineering job market.

Author(s)	Shaul, Kerry, Department of Theater & Dance
Title	American College Dance Festival – 2009
Award	$3,000
Abstract	The American College Dance Festival (ACDF) is "the" yearly event in the United States for interacting with dance educators and dance students from other universities. It gives students and faculty alike the opportunity to take classes with each other, gain information on what is being taught at other universities, and learn about new areas in dance research (such as dance science). In addition, we will be attending a significant number of daily dance concerts. These concerts usually include a professional dance company, a faculty dance concert, adjudicated concerts of works from universities around the country, and a gala of dances selected by the adjudicators. SIUE students and faculty often submit an original piece of choreography, performed by SIUE students, for adjudication by recognized professional choreographers and dance educators. ACDF substantially contributes to excellence in undergraduate education by providing students with an intensive four day immersion in dance. This is very important because our students do not get enough experimental exposure to what is happening with dance nationally. Attending the American College Dance Festival is a tremendous educational and motivational experience for our dance students.

Author(s)	Stone, Lucian, Department of Philosophy
Title	Iran in Its Own Voice: A Speaker, Film, and Art Series
Award	$9,486
Abstract	This project intends to fill a large void in our undergraduate curriculum, which is brought to light by current political tensions between the United States and Iran. In short, as the only specialist of Iranian studies on

	campus, I am painfully aware of the lack of access our students have to information about Iranian culture. Due to other curriculum responsibilities, I am only able to teach a short segment dedicated to Iran in one course that I teach, which is taught once per year (to a class of about 30 students). This is simply inexcusable, especially at a time of heightened need for mutual understanding. This EUE proposal would support a yearlong series of events to educate our undergraduate students and extended community about Iranian culture, through a series of invited lectures by top Iranian intellectuals, film screenings, and art displays.

Author(s)	Theodorakis, Christopher, Department of Biological Sciences Durbin, Catherine, Department of Biological Sciences Brunkow, Paul, Department of Biological Sciences and Sawyer, Sara, Department of Biological Sciences
Title	Development of Laboratory Manual for Biology 120
Award	$13,731
Abstract	Students trained in biological sciences often go on to serve in professions with high importance to society (e.g., doctors, dentists, pharmacists). An important component of the biology education of these students consists of hands on experience, which in Biology 120 is served by the laboratory sections. Thus, providing a quality laboratory learning experience in Biology 120 is of high merit. However, this is hampered by the lack of availability of a laboratory manual well-suited to SIUE Biology 120 students. Such a manual would serve biology majors and pre-professional students. There are currently 140-180 students that take Biology 120 per semester. The objective of this project is to enhance the learning experience of Biology 120 students. The specific aim is to design and produce a laboratory manual for Biology 120 that is specifically tailored to the needs of SIUE Biology 120 students. The laboratory manual that will be developed in this project will consist of text, tables, and figures. The text will provide background information on the organisms, specimens, or laboratory exercises in which the students will engage. The tables will be summaries of distinguishing characteristics and examples of the various animal groups students will be examining in the laboratory. The illustrations will consist of artwork and photographs of live and preserved specimens, representatives of the various animal groups, microscope slides, models, cells or cellular processes, dissections, life cycles of the animals, or demonstrations of the equipment or procedures to be used. This laboratory manual will be published internally via SIUE Printing & Design, or externally via the custom publishing division of McGraw Hill. This product will be disseminated to SIUE students via the SIUE bookstore.

Author(s)	Thomas, Michael, Department of Theater and Dance
Title	Guest Artist, Tap Dance – Jenai Cutcher
Award	$2,600
Abstract	This proposal requests support to bring professional tap dance artist Jenai Cutcher to SIUE for a series of open workshops and lectures on the history of tap dance in America. She will be a guest artist in the following classes: Movement Fundamentals, Dance Appreciation, Dance History and Dance CIV and conduct tap dance technique classes covering beginner through advance levels. Ms. Cutcher will also create a new tap dance composition

	to premiere in the 2008 faculty Dance in Concert. Jenai Cutcher is pioneer in chronicling the history of women's contributions to tap dance through her video projects with plans for international distribution. Other credits and experiences include published work for Rosen Publishing,; The Village Voice, NYC; Critical Dance/Ballet Dance Magazine; International Tap Dance Association; Columbus Alive; and Dance magazine; as well as teaching credentials with STEPS on Broadway, NYC; Peridance Center, NYC; United Nations International School, NYC; CORE Academy of Movement, NJ; and The Ohio State University. MS. A residency by Ms. Cutcher would take place early in the Fall semester taking place primarily in the month of September. Her visit supplements the current dance curriculum by including a musical theater dance component which our students find interesting and exciting especially since our summer shows often require this style of dance.

Author(s)	Vanderwood, Jessica, Department of University Housing Stonecipher ,Amanda, Department of University Housing
Title	StrengthsQuest: Charting the Exploration
Award	$8,787
Abstract	In Bluff Hall, a residence hall of 500 freshmen, students are intentionally assigned to a space based on their major. Unlike other residence halls, Bluff houses 11 Focused Interest Communities (FIC); each FIC is tied to an academic interest and is paired with a Faculty Fellow from the related department. Since the inception of the FIC program, initiatives have been created to strengthen the connection between coursework and outside-the-classroom experiences. Areas of concern that exist within the current FIC program are: the students' inability to connect to an academic major, undeveloped study skills and low levels of meaningful involvement within the university. Therefore, to ensure self-actualization in students, University Housing should intentionally begin a pilot program within Bluff that allows for knowledge dissemination and peer-to-peer skill building. In doing so, a sustainable conduit between Academic Affairs and Student Affairs is created through the use of the StrengthsQuest program and the StrengthsFinder instrument. The following foci will be used to guide the SQ program at Bluff Hall: talents-assessment, self-awareness, intentional planning, and building connections within the university. These four principles will be used to guide the pilot program in Bluff Hall. The StrengthsFinder instrument will be administered during the first week of classes. A sequential seminar series will be developed so that students are able to capitalize on their strengths. Facilitators of the seminar series will include: faculty fellows, Career Counseling, Academic Advising, Counseling Services, and University Housing professionals. The SQ program will provide opportunities that allow each student to utilize their strengths while engaging in intentional activities. Some of these activities may include: Strengths-based career fair, intramural sports tournament, faculty outreach within Bluff Hall, service learning and civic engagement opportunities. To conclude the pilot program in Bluff Hall, a closing ceremony will be held for all students living in Bluff.

Author(s)	Voss, Eric, Department of Chemistry
Title	Hands-on Periodic Table: An Element Collection for Chemistry Courses
Award	$6,756

Abstract	Most chemists would agree that the organization of the chemical elements into the periodic table is one of the most important concepts in chemistry. The purpose of this Excellence in Undergraduate Education project is to develop educational materials for chemistry courses at SIUE using actual chemical samples from The Element Collection that students can hold and closely examine. Classroom and laboratory activities will be designed as modules that are easy to introduce in a variety of courses. Classroom sets of individual copies of The Photo Periodic Table will be used in conjunction with the collection. Chemistry courses form the foundation of the science curriculum, and more than 1600 science and engineering students each year will have the opportunity to handle element samples as a result of this project. Student learning objectives include 1) excitement and enthusiasm for science, 2) awareness of applications of scientific thinking, 3) understanding of periodic properties of the elements, and 4) improved quantitative reasoning, problem solving, analysis, and synthesis of concepts. This project will enhance the experience of students during 2008-09, as well as many students in future years.

Author(s)	Wei, Chin-Chuan, Department of Chemistry Dixon, Robert, Department of Chemistry
Title	Biochemistry Modules for Undergraduate Chemistry and Biochemistry Courses
Award	$13,116
Abstract	To enhance our biochemistry program within the Department and to provide a better learning environment for our undergraduates, here we plan to implement more modern biochemistry experiments into our current curriculum with all resources that are available either within the Department or obtained through external grants. The proposed modules will be integrated into the biochemistry discipline, but at the same time are flexible enough to be implemented into other experiments that are specific for other disciplines such as chemistry, forensics, and medicinal chemistry. The successfulness of this proposal will not only serve as seeds for us to seek external supports to further strengthen our program, but will also benefit students taking the biochemistry laboratory and will allow us to demonstrate those concepts in the biochemistry lecture courses (CHEM 451, 459) as well as general courses like CHEM 120n&b (General, Organic, and Biological Chemistry for Nurses) and CHEM 124n&b. A lab manual for CHEM 455 that is specific to our SIUe students will be generated.

Author(s)	Zimmermann Holt, Julie, Department of Anthropology
Title	Archaeology Field School at the Kruckeberg Site
Award	$11,651
Abstract	The archaeology field school (ANTH 375 and 475) is taken by students seeking the BS in anthropology to fulfill their school requirement; other students take it as an elective to gain archaeological field experience. The field school provides the ideal setting for active learning as students participate in a research-driven excavation on a real archaeological site. After completing the field school many anthropology students continue this path of active learning as they conduct their own original research on field school materials for their senior projects. Senior projects based on prior field schools have won awards and been published in peer-reviewed

	journals. The proposed location of the 2009 field school is the Kruckeberg site, a village contemporary with Cahokia and located 20 miles north of Cahokia via Cahokia Creek. The site is significant in local prehistory for being the only village of this time period known to exist in the uplands of Cahokia Creek; it is even more significant for the possibility that it is one of only four sites in the Cahokian region that features a palisade. Students taking the field school will participate in original research that will shed significant light on the Cahokia settlement system. Interested students can continue to contribute to this research after the field school through their senior projects. They will have the opportunity to publish their research independently or as co-authors.