

FY 2014 Awards

Author(s)	Steffany Chleboun
Title	Anatomy and Neurology of the Brain
Award	\$431
Abstract	Knowledge of human neuroanatomy and neurophysiology is critical for effective Speech-Language Pathologists and Audiologists. To ensure that our students receive this information, starting with the fa ll 2014 cohort, our undergraduate students will be required to take a course in neuroanatomy and neurophysiology during their final semester of coursework. To enhance student learning, I am requesting financial support for the purchase of 2 human brains(+ supplies) to use throughout the course.

Author(s)	Igor Crk
Title	Enhancing the Undergraduate CS Curriculum with "Topics in Distributed Computing"
Award	\$8150
Abstract	Distributed computing is a growing field of computer science that studies the collective operation of a set of computers connected via a computer network to achieve a common goal. The basics of parallelism, i.e. the simultaneous processing of several tasks, are currently incorporated in the core curriculum offered to undergraduates at the department of computer science. Proposed here, is the development of a course that would build on the students' current grasp of synchronization, data communication, and performance issues in the context of modern distributed computing platforms, be it cloud, grid, or cluster computing, and provide them with the ability to leverage these technologies to solve "big data" problems, while addressing the issues inherent to distributed computing environments. The skills gained throughout the proposed course are a genuine requirement for a computer science graduate seeking a career with any of a growing number of competitive industry players, not the least of which are the now familiar Google, Microsoft, IBM, Yahoo, and Amazon. Similarly, students seeking placement in graduate programs, regardless of their chosen branch of science, are finding themselves faced with research endeavors which are increasingly dependent on large amounts of data which must be managed and processed. The course developed with EUE support will be designed to be effectively taught in both a traditional lecture setting and as an online course. Initially, the course will be taught as a CS490 Topics in Computer Science course in the Fall of 2013.

Author(s)	Richard Essner
Title	Development of a Blended Course in Human Biology
Award	\$7714
Abstract	Human Biology BIOL 140 is a course in the Department of Biological Sciences that is intended to provide a general introduction to the human body. A primary objective of this course is to better prepare students for the demands of the more advanced human anatomy and physiology courses, BIOL 240A and B. As interest in the health professions continues to grow, the numbers of students enrolled in BIOL 140 has increased dramatically. The proposed project is to develop a blended version of BIOL 140, Human Biology to be offered initially during the summer. The proposed course will utilize BlackBoard as a delivery platform and include integrated audio and video lectures, online quizzes, and online discussion boards, as well as a face-to-face comprehensive final exam. The blended format offers a number of advantages, including: 1) easing pressure on enrollment; 2) improving retention by providing students residing in other parts of Illinois the opportunity to complete the course over the summer; and 3) training students to make use of online resources (e.g., BlackBoard, animations, etc.) that are heavily emphasized but underutilized in the advanced anatomy and physiology courses. Once implemented, the proposed course is expected to become a regular offering.

Author(s)	Ryan Fries, Huaguo Zhou
Title	Traffic Signal Lab: Phase II
Award	\$12840
Abstract	The Department of Civil Engineering has used a traffic signal lab in their transportation engineering courses since 2011 (EUE 10-06), impacting more than 170 undergraduate students. In the summer of 2012, budgets allowed the purchase of additional equipment for the laboratory, significantly advancing its capabilities. The objective of this EUE grant is to purchase a cabinet for this equipment and support students to assemble this next generation of the traffic signal lab. Students impacted by this new lab will gain valuable hands-on experience with how 1) traffic signals can detect the presence of waiting vehicles, 2) change timing to accommodate pedestrians and meet the Americans with Disabilities Act, and 3) react to approaching emergency vehicles, providing them green lights. This next generation traffic signal lab will include blended learning tools, aligning with the EUE program's 2014 emphases. The project's evaluation will include a rigorous evaluation of student performance on assignments and their feedback on a validated survey instrument. The findings of this project will be disseminated in scholarly sources such as the Journal of Engineering Education or the American Society of Engineering Education Annual Meeting.

Author(s)	Michael Grossman
Title	Develop an online version of Geog 202: Resource Use and Management
Award	\$7220
Abstract	<p>This proposal is a request for funding to develop an online version of Geography 202: Resource Use and Management to be offered during summer sessions beginning in 2014. Geography 202 covers the fundamentals of basic resource utilization and the application of environmental conservation and preservation principles to resource management. The course fulfills General Education requirements in Life Sciences-Breadth and the Natural Sciences & Math Distribution. It is part of the new Sustainability Area of Specialization in the College of Arts and Sciences and is taken by many undergraduates to meet their science requirement. Offering this course as a summer online course would provide greater opportunity for students to take the course. It would also make the course available to residential students who are away from campus during the summer. Because of the currency of topics in resource conservation, environment, and sustainability, an online format is ideal to take advantage of the immediacy offered by the online medium. An online format makes it possible to use a variety of media (text, slides, video, audio, blogs, etc.) to present material and to assess student learning. The online format allows students and the instructor to exchange ideas and opinions and to comment more freely in a format that many students are used to. Online communication often enhances the participation of students who would otherwise not say much in class. Moving this course to an online format will contribute to excellence in undergraduate education at SIUE by utilizing 21st century media and tools making the course a richer and more dynamic learning experience for students.</p>

Author(s)	Lydia Jackson, Jamie Conklin, Elizabeth Moreton, Cecelia Eilering
Title	Creating a Hybrid Information Literacy Competency for Undergraduate Students
Award	\$5482
Abstract	<p>The Lovejoy Library will create an information literacy (IL) competency to include one face-to-face session and nine online modules. The competency will be targeted to primarily freshmen and sophomores and will teach them research skills, including how to frame an information need; how to find, evaluate, and select appropriate sources; and how to avoid plagiarism. Students can work on the modules at their own pace and have more time to learn the material than the current 50- minute face-to-face instruction sessions allow. The goal is that students will feel more comfortable with their research abilities and will retain information literacy skills needed to succeed in their courses and in their personal and professional lives. We request funds for software, a microphone, and sound booth for online module development, as well as release time for a library faculty member to develop the modules. We will include an assessment component in the competency,</p>

	which we will use to evaluate the project and revise for future use. We will test a single module this summer and the full competency in the Fall 2013 semester. We will then modify and re-pilot in Spring 2014 before full implementation in Summer 2014. We will disseminate results on campus and in the library field through presentations and papers.
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Author(s)	Nicole Klein
Title	Blended Learning Personal Health Course to Meet EH Designation
Award	\$6933
Abstract	Under the Lincoln plan, all undergraduates must satisfy the Experience-Health (EH) designation prior to graduation. Only 13 courses are currently offered (most only once per year) and all are in a traditional classroom format. The proposed project is to develop a Personal Health course in a blended online/classroom environment. The blended class will address the physiological, psychological and social well-being of individuals, focusing on critical analysis and application of factors affecting health on both an individual and the collective level. Topics to be covered include mental and emotional health; stress management; violence prevention; healthy relationships and sexuality; contraception, pregnancy and childbirth; addictive behaviors; alcohol, tobacco and other drug use; nutrition; weight management; personal fitness; cardiovascular diseases, diabetes and cancer; infectious diseases; aging; environmental health; health consumerism; and complementary and alternative medicine. The target date for implementing the blended class is fall 2014.

Author(s)	Steve Klein
Title	Converting CS 140 into an examples-based course
Award	\$8875
Abstract	CS 140 Introduction to Computing I is the first computer programming course many students take. Its content is very technical, demanding, and unforgiving. This environment is perfect for generating frustration in beginners and students may quickly become discouraged. D/F/Withdraw rates are high. The current instructional method used in CS 140 is to deliver lectures that follow the topics list from a textbook. This delivery method may not provide a good overall frame of reference for first-time programming students. Content is delivered somewhat piecemeal and course topics can easily be seen as non-cohesive jumbles of ideas. Another weakness of traditional textbook content delivery is the emphasis on learning the details of a programming language without coverage of computational problem solving. I propose to reorganize the delivery of course content in CS 140 so that it provides a conceptual framework from start to finish. Instead of providing concepts as done in traditional textbooks, I will develop a collection of programming example problems that cover the course topics and introduce computational problem solving techniques as well. The desired result will be an environment where

	students immediately recognize new topic relevance and develop programming and problem solving skills concurrently and with increased enthusiasm. This will also, hopefully, reduce DFW rates.
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Author(s)	Hoo Sang Ko, Marcelo Azambuja
Title	Developing an Online and Offline Learning Environment for RFID Technology
Award	\$11585
Abstract	

Author(s)	Jessica Krim
Title	Building the Plane while Flying It: A response to the state of Illinois' implementation of the edTPA as an evaluation tool for teacher candidates
Award	\$13342
Abstract	My goals for this study are to (1) research, examine, and refine effective practices that will convey to teacher candidates how to systematically and purposefully reflect upon their teaching practice using video analysis, (2) collect data that will document student knowledge, skills, and dispositions, (3) survey faculty in the School of Education about their practices in the field, (4) share this knowledge with my colleagues, and (5) facilitate teacher candidates' ability to successfully complete the Teacher Performance Assessment. To this end, I would like to implement a year-long study in which I will work with undergraduate and graduate student teachers that I am assigned to in CI 315 / CI 352 and CI559 using methods of video and observation analysis which I feel will benefit the professional development of the teacher candidates enrolled in these classes.

Author(s)	Z.Q. Lin, K. Johnson, M. Chan
Title	Enhancing Hands-On Learning Experiences from Theory to Practice: Modification of ENSC 220L & Development of ENSC 250L
Award	\$19900
Abstract	The Principles of Environmental Sciences Laboratory (ENSC 220L) was developed for non-science major students in the Environmental Sciences minor and also as a BPS-DNSM lab course for general education. The enrollment in ENSC 220L has increased substantially since 2006, with an enrollment of 108 in the fall of 2012. After being taught for six years, ENSC 220L was recently reviewed by the Program, indicating that some lab experiments are lack of rigor and need to be significantly improved. In addition, because the ENSC Program is developing a new undergraduate degree in environmental sciences (specialization in environmental health and toxicology), a new lab course for the science major students will also be required. The objectives of this project are to revise ENSC 220L to improve the rigor and quality of the lab experiments for non-major students and to develop a new lab course (ENSC 250L) for the students majoring in Environmental Sciences. The new lab experiments will be developed to complement the lecture materials and to enhance students' strength in the

	learning goals and build skills in solving real-world environmental problems. The hands-on learning experience will promote students' professional education and career opportunities in a wide area of interests.
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Author(s)	Sarah Luesse
Title	Acquisition of a Microwave Synthesizer to Enhance Synthetic Chemistry Curriculum
Award	\$23448
Abstract	This proposal seeks support to fund the purchase of a microwave synthesizer, equipment that is essential to improving our current synthetic chemistry curriculum and student research activities. The goal is to improve the preparation of our science majors by providing experience with industry-grade equipment and techniques, which are not currently possible due to time, cost, and safety issues. Annually -270 undergraduate students are enrolled in CHEM 245, Organic Chemistry Laboratory and the department additionally serves undergraduate majors and minors with hands-on research experiences. I am requesting funding to purchase this equipment, which will make possible the updating of our current curriculum for CHEM 245 as well as allow for the development of an advanced synthesis course (CHEM 449).

Author(s)	Debbie Mann
Title	SIUE-UCO Faculty Cooperation: Short-term exchange, long-term impact
Award	\$2800
Abstract	This EUE proposal requests support to partially cover the costs of a two-week asynchronous faculty exchange involving Dr. J. Debbie Mann, Professor of French, SIUE Department of Foreign Languages, and Dr. Yannick le Boulicaut, who holds the rank of Professor in the IPL V (Institut de Perfectionnement en Langues Vivantes (Modern Languages Department) at the Université Catholique de l'Ouest (UCO) in Angers, France. The costs to be partially defrayed by the proposed EUE project are principally associated with Y. le Boulicaut's two-week stay at SIUE as a visiting instructor/scholar in April 2014. The focus of the project is on creating a lasting impact from a short-term exchange by producing teaching resources for continuing use at SIUE to enhance the ongoing delivery of French language and culture courses at all levels, from general education (FR 101,102, FL IIIe) to advanced. In carrying out the 2014 project, le Boulicaut and Mann will be working from a point of strength, their past experience at each institution, to implement an approach to globalization which is based on viewing the exchange as an opportunity for lasting sharing rather than just for limited-time "trading" of faculty expertise. For undergraduate education at SIUE, a major aspect of the long-term benefit will be the creation of a series of video segments filmed in France and at SIUE which will fill a need identified by D. Mann in her teaching of general education courses and advanced French classes.

Author(s)	Jo Ellen Moore
Title	Project Support Center for Business Undergraduate Programs
Award	\$12321
Abstract	<p>The School of Business realized a major enhancement to the curricula of all business undergraduate programs in Fall 2012 through the implementation of new course MGMT 331 Managing Group Projects. This new course is required for all of our majors, which gives it the broadest possible impact in our business undergraduate education. The course is geared toward helping students acquire task and interpersonal skills needed to work effectively in a group to accomplish stated goals, and the course is the first step toward our ultimate goal of producing business graduates who utilize best practices in project work, and for whom those practices are second nature. In order for the project skills to become routine, students need to use them over and over. So, our focus now turns to establishing an infrastructure to not only support students in acquiring the project skills but also to support faculty throughout the School in utilizing and reinforcing the skills in the classes they teach. This injection of project skills throughout our business curricula is truly innovative; no other school is doing what we are doing. This proposal requests 1 course release (at call staff rate) for a faculty member to launch a Project Support Center (PSC) for the School of Business, 100 copies of the Techniques for Managing Projects book to be distributed to all of our faculty and staff, and a 50% graduate assistant for 9 months. The proposal provides details regarding the anticipated responsibilities of the PSC and services it will provide to students, faculty, and staff.</p>

Author(s)	Barbara Nwacha
Title	Developing Content for the iPad
Award	\$9480
Abstract	<p>Consumption of data through an iPad is different than just reading a digital version of a printed document. There is an interactivity that should be considered in the development of the iPad product (book, app, or zine). My proposed project is to secure 20 iPads for upper level graphic design students to use for the production of iPad content in the ART 440 Publication and Information Design scheduled for fall of 2013. Access to an iPad in a classroom setting will provide students with the exposure to develop content for iPads, including e-books, online "zines" and e-applications. Exposure to this design option would provide our students with the experience of designing for current state-of-the-art consumer devices.</p>

Author(s)	Laura Schoenecker
Title	MyMathTest Support for MS 250 Mathematical Methods for Business Analysis
Award	\$4620
Abstract	The applicant requests funds to purchase access to MyMathTest for all

	<p>students enrolled in MS 250 Mathematical Methods for Business Analysis for Fall semester 2012 and Spring semester 2013. My Math Test is an online math assessment and review tool. Students in MS 250 will take a test on MyMathTest to assess their grasp of the College Algebra topics that will be applied in MS 250. Based on a student's performance on the assessment, the website provides access to review modules for areas of weakness.</p> <p>MyMathTest will provide much-needed assistance to students entering MS 250 who completed their College Algebra prerequisite with a C, or completed the prerequisite several semesters before enrolling in MS 250. Strengthening students' College Algebra skills should have the direct result of increasing the proportion of students successfully completing MS 250 with a C or better, allowing them to pursue admission into the School of Business. An indirect benefit of the project is less class time required for algebra review and more time for coverage of additional applications of mathematical skills.</p>
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Author(s)	Victoria Scott, Binod Pokhrel
Title	Implementing the edTPA
Award	\$3990
Abstract	<p>The Illinois State Board of Education which controls teacher licensure was one of the six original states to pilot the Teacher Performance Assessment (edTPA), developed by the Standard University and designed to measure teacher candidates' ability to appropriately instruct K-12 students in the Student Academic Content Standards. This assessment is designed with a focus on student learning and principles from research and theory. In order to capture elements of instruction and student learning, teacher candidates are required to produce video clips displaying and providing evidence of the quality of instruction. Although there is no requirement or expectation for a professional quality video, yet, video evidence of instruction is required. Lack of proper equipment and difficulty in using sophisticated video camera is a matter of concern expressed by both students and faculty. To facilitate this process of video taping considering their concerns, we have identified cameras intended to make available to students on a check out basis. These Sony Bloggies very simple, quality cameras is we are requesting for the project.</p>

Author(s)	Abigail Sidwell, Luci Kohn
Title	A Digital Learning Companion for Human Biology Labs
Award	\$5263
Abstract	<p>This project addresses a growing issue in Human Anatomy and Physiology (BIOL 240a and BIOL 240b), a set of courses that have a big impact on the health professional programs throughout the SIUE community. Currently, more than 600 students take this course sequence, and the enrollment keeps growing. We want to create additional resources to provide our students with the best learning experience possible. We want to ensure that all of the</p>

	<p>students have access to classroom learning resources outside scheduled class time. The purpose of this project is to provide a CD/ online resource for students to use when they are studying outside class. This project will provide images of the material found in the lab for the students to use as a study aid. The resource proposed in this project will provide histology images directly from the slides used in the lab and pictures taken directly from the models used in lab. They will be labeled correctly and using the appropriate terminology. This will ensure the students have the appropriate resources when they do not have direct access to their course instructor, teaching assistant, and lab materials. The resource will also be able to provide practice activities and tests that the students will find valuable when it comes close to test times.</p>
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Author(s)	Terry Wood, Marjorie Baier
Title	Nursing Student Success with Test-Taking Skills
Award	\$9862
Abstract	<p>The SON initiated a tutoring and remediation program in 2010, directed by Terry Wood. We request EVE funds to pay for 1-year rentals of test-taking skills e-books. Nugent & Vitale Test for Success for Beginning Nursing Students. Students will access these e-books on computers and mobile devices. Problems with test-taking emerge early in the nursing curriculum. Students targeted will be sophomores and accelerated students in their first clinical course who need help with test-taking skills. They will attend a test-taking seminar and submit practice tests. The seminar will introduce students to cognitive levels framework. This project will support development of online learning opportunities. A graduate research assistant will develop a research proposal to measure outcomes. The project will be considered a success upon students' completion of the test-taking materials and improved scores on standardized examinations. Results of this study will be submitted for publication in nursing journals and presentations at conferences.</p>