



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

<u>Division</u>	Academic Affairs Campus Division	Jonathan	Pfau Library Smith
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Total Amount Requested for FY 2015 **\$55,280.00**

Project Title: **Library Laptop Lending Expansion**

Project Abstract:

In the fall of 2012 Pfau Library implemented a laptop lending program. The lending program was an immediate success, with student demand far outstripping the supply of laptops. Though the number of laptops have since increased since it began, it still doesn't come close to meeting the demand. During Fall 2013 laptops were checked out 9,096 times, and during Fall 2014 laptops were checked out 10,871 times. On most schooldays the entire inventory is checked out by 11:00am. Students even line up at the Check-Out Desk to wait for a laptop to be returned, so that they may borrow it. This funding request proposes adding 40 laptops to the current inventory. These laptops will provide a similar computing experience as the those currently used, building on our successful past deployments. They are 13-inch MacBook Pros with Solid State Drives, configured to dual-boot, allowing the student to choose between Mac OS X and Windows 7 operating systems. A student survey conducted in 2013 found that there was not a clear preference of operating system - in fact, many respondents use both operating systems. The aluminum casing and solid state drives have proven to be very rugged. While some laptops have been returned with serious dents they continue function normally.

Challenge(s) this project will address:

Access to computing resources.

Alternate solution(s) should this project not be funded:

We would investigate the option of purchasing low-cost Chrome Books. However, these would not have familiar applications such as Microsoft Word on them.

Impact(s) if this project is not funded:

Laptop demand would continue to far outstrip supply. Many students seeking to borrow a laptop are turned away daily.

Cost: \$\$ (One time or recurring)

\$55,280.00 (one time)

What are your intended Process Outcomes and/or Student Learning Outcomes?

1) Expansion of the laptop lending program will increase the availability of computers for students, and will result in a reduced waiting time for available workstations during peak periods. 2)These laptops will enhance the student experience and success by providing increased access to information resources and other computing needs. This proposal has the potential to impact the entire student population due to the nature of the library, but especially those students who may not own or have access to a laptop computer.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

1)To measure use we will gather circulation statistics, which record the time, day, and duration of every check-out; and compare with past circulation statistics to determine the change in use. 2)To evaluate impact we will survey the students who use the laptops during a select period of time.

Project Timeline **Start:** 07/01/2015 **End:** 06/30/2018 **First Quarter of Student Use** Fall 2015

Budget:

http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/82-2cac4363cbdd079b514a7323c2b599d9_Vital_Budget_Template_20151laptop.xls



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

<u>Division</u>	Academic Affairs Campus Division	Leslie	Pfau Library Kong
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Total Amount Requested for FY 2015 **\$15,000.00**

Project Title: **Streaming Media for Students**

Project Abstract:

Using "hoopla," a digital media platform, the Library proposes to make available to students, 200,000+ video, music, and audiobook titles. Media content is available via a mobile app (for IOS and Android devices), and can be streamed to mobile devices or computers. The extensive collection features new, popular, classic, and educational titles through major entertainment companies such as NBC Universal, Starz Media, Paramount, Warner Music, PBS, BBC America, Scholastic, and National Geographic. Streaming media is currently the trend in the consumer marketplace. The availability of this service increases student access to a diverse range of materials. Content directly supports curriculum relevant to communication studies, economics, education, ethnic studies, history, music, psychology, sociology, business administration, theatre arts, et al. At an average cost per circulation of \$1.90 (cost borne by the Library), this is a very cost effective distribution model. This "Netflix" type platform is very popular, and is successfully in use by many libraries across the country. This 24/7 service will significantly enhance students' access to documentaries, popular films, music, and audiobooks. Students can access titles without ever having to come physically to campus. As a result, one of the major groups benefitting will be distance learners. Titles are "borrowed" for specified loan periods, and "returned" automatically once the loan period expires, thus eliminating annoying overdue fines. Additionally, multiple users may simultaneously access titles, so no more waiting for materials to be returned. Close captioning is available for most films in the collection.

Challenge(s) this project will address:

The Library has a finite budget to support students' media collection needs. As such, it usually can only afford to purchase single titles of videos, music, and audiobooks. Accordingly, students have limited access to such materials. Physical items wear out, become damaged, or are lost or stolen. The Library's ability to replace such items is limited to budgetary restrictions. The Library's ability to "reach" students with its collections will be extended with hoopla, as distance users will certainly benefit. The availability of audiobooks and close captioned films through streaming technology will benefit students with special needs or disabilities.

Alternate solution(s) should this project not be funded:

The Library will look to other vendors who provide complementary digital platforms for streaming media.

Impact(s) if this project is not funded:

Students' access to media content will continue to be limited to current physical collections, and subscribed streaming content via Alexander Street Press.

Cost: \$\$ (One time or recurring)

Proposed funding is \$15,000 for the first year; \$12,000 for the second year; and \$10,000 for the third year of this pilot program. Note: The Library plans to supplement the necessary funds to support the service.

What are your intended Process Outcomes and/or Student Learning Outcomes?

Process Outcomes: 1. Through student use of hoopla, the Library will experience an increase in circulation of media content. 2. Through student use of hoopla, satisfaction levels of students will increase as a result of enhanced access and availability of media content.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

1. The Library will monitor and track usage statistics through hoopla's administrative portal, and compare and contrast this usage with its physical collection. 2. The Library will administer surveys to assess and gauge student satisfaction of this service.

<u>Project Timeline</u>	Start: 07/01/2015	End: 06/30/2015	<u>First Quarter of Student Use</u>	Summer 2015
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Budget:

http://surveyqizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/158-1ca20274b7a4a1fda582fb4bc4ffa94c_Vital_Budget_Template_Lib_Streaming.xls



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division	Academic Affairs Campus Division	Michael	College of Natural Sciences Chao
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Total Amount Requested for FY 2015 **\$80,000.00**

Project Title: **Laser scanning confocal microscopy for enhancing student training in biological imaging technology**

Project Abstract:

The ability to visualize microscopic structures at the subcellular level is central to the biological and biomedical sciences. The Department of Biology has consistently strived to maintain access for our students to state-of-the-art imaging technology, as evidenced by our electron microscopy and fluorescence microscopy suites that are utilized across many of our course offerings, and to students working on research projects with our faculty. As technology has progressed, the new gold standard for biological imaging is laser scanning confocal microscopy (LSCM). LSCM allows for high-resolution imaging of single molecules within cells, which is a central aspect of understanding cellular and molecular function. Many entry level biological, biomedical, and biotechnological positions require knowledge and experience with biological imaging; therefore, providing our students access to and training on an up-to-date LSCM platform will give them a significant advantage in this job market. Hands-on experience with LSCM imaging technology will also make our students highly competitive for admissions to biomedical professional and graduate programs, as our students will come pre-trained on industry standard equipment. Entry level LSCM is priced starting at \$100k. Since equipment turnover is very rapid within the biotechnology industry, this creates a robust used market for high performance LSCM equipment. We propose a target price of \$ 80k maximum for a used complete LSCM package including microscope, excitation laser(s), and computer workstation with software. We will identify an upgradable system so that newly developed technologies, such as stimulated emission depletion (STED) microscopy, can be added on at a future date.

Challenge(s) this project will address:

Within a rapidly advancing field such as the biological sciences, a major challenge is ensuring that students stay current in terms of emerging technologies. Several years ago LSCM access remained limited to researchers; today, LSCM is becoming standard in the field. LSCM technology will allow our students access to state-of-the-art biological imaging technology, and therefore allow their skills to remain relevant as they enter the workforce or professional/graduate programs.

Alternate solution(s) should this project not be funded:

Given that LSCM requires a significant capital outlay at the onset, the main alternatives in lieu of VTI funding will be to seek extramural equipment grants from agencies such as NSF, which have very poor funding rates.

Impact(s) if this project is not funded:

The main impact for lacking LSCM within our program is that students will be learning biological imaging on last-generation technology. We know that CSUSB students (and CSU students in general) have a significant advantage in the job market and in professional/graduate program admissions because of the emphasis we place on hands-on training in the laboratory. As LSCM becomes industry-standard technology, our students cannot stay current on essential job skills and therefore lose their competitive edge over their peers from other institutions.

Cost: \$\$ (One time or recurring)

The cost of a used system is estimated to be \$80,000 (maximum). This will be a one-time cost. This will include a complete system consisting of microscope platform with all appropriate optics, excitation laser, detector, image analysis computer workstation with software, and appropriate service costs to set up the used system. Exact costs cannot be determined at this time due to market conditions and used equipment availability. Used systems typically run between \$40,000-\$70,000, and there will be some funds needed to be allocated for vendor support for initial equipment setup. There are no personnel costs.

What are your intended Process Outcomes and/or Student Learning Outcomes?

As part of the SLOs of relevant lab courses (e.g., BIOL 300 or BIOL 513) that will incorporate LSCM, we will include some variation of the following language: 1. Students will learn about the theory underlying relevant microscopy techniques (including LSCM). 2. Students will have a working knowledge of the operation of microscopes and related equipment (including LSCM). 3. Students will be able to capture images from microscopy equipment (including LSCM) and perform image analysis using appropriate software.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

We will assess the success of this proposal as follows: 1. Knowledge on the theory underlying relevant microscopy techniques will be assessed during the lab practical of the appropriate course (s). 2. Working knowledge of the operation of microscopes will be assessed by tracking our alumni who successfully obtain positions in relevant industry and /or professional/graduate programs and conduct surveys on how useful they found LSCM training as part of their undergraduate education. 3. The ability to capture and analyze images will be assessed through lab reports written by the students in the relevant lab course(s).

<u>Project Timeline</u>	Start: 09/24/2015	End: 06/22/2018	<u>First Quarter of Student Use</u>	Fall 2015, pending equipment availability
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Statements of support by collaborating organization(s) or department(s) (if applicable)

http://surveygizmolibrary.s3.amazonaws.com/library/196359/HPACletter_pdf.pdf

http://surveygizmoreponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/86-a1780b6d5e856a98dd85df86e36da660_AMSA-Letter+of+Support.doc

[http://surveygizmolibrary.s3.amazonaws.com/library/196359/bioclubvtiletter.pdf" target="_blank">bio club vti letter.pdf](http://surveygizmolibrary.s3.amazonaws.com/library/196359/bioclubvtiletter.pdf)

Budget:

http://surveygizmoreponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/83-6df3860b7d5aa9efde7fb56da50917ac_Vital_Budget_Template_20151.xls



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division Academic Affairs College of Arts and Letters
Campus Division Kurt Collins

Total Amount Requested for FY 2015 \$4,383.72

Project Title: 3D Team Render server

Project Abstract:

This project is intended to streamline the process of creating portfolio-quality 3D renders for students enrolled in courses that make use of Industry-standard Cinema 4D modeling and animation software.

Challenge(s) this project will address:

Students in the Design programs are required to buy their own laptop computers, however portable computers tend to be less-capable of rendering high-quality finished-products for use in portfolios or regional competitions. While laptops can render the necessary final product, the student is may be forced to let the computer work on the render project continuously for more than 100 hours. This computer requested will act as a "Master computer" communicating with all the computers assigned to the "Team" assigning each a small portion of the project being rendered. In this fashion the project can be rendered in a matter of minutes rather than a matter of days.

Alternate solution(s) should this project not be funded:

Students could purchase time on "render-farms". These cloud-based services sell time on networked computers however, time is usually sold as a subscription and it is very expensive.

Impact(s) if this project is not funded:

Students will choose less difficult and less professional projects impacting the quality of their completed portfolios and their ability to secure employment.

Cost: \$\$ (One time or recurring)

\$4702.32 tax included one time cost.

What are your intended Process Outcomes and/or Student Learning Outcomes?

As more and more movie and television programs rely on 3D generated special effects students will gain valuable experience working in a multi-computer rendering environment.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

The software maintains utilization records on the server.

Project Timeline **Start:** 09/01/2015 **End:** 06/30/2016 **First Quarter of Student Use** Fall 2015



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division Student Affairs Veterans Success Center
Campus Division Marci Daniels

Total Amount Requested for FY 2015 \$27,466.00

Project Title: Star Track

Project Abstract:

The CSUSB Veterans Success Center (VSC) has been in operation for nearly three years and currently serves 1,441 student veterans and dependents. The VSC is requesting funding from the VTI to implement Project Star Track, which will enhance data collection methods on the student veteran population by utilizing technology to comprehensively track students; increase student productivity by adding more computer work stations; and provide greater access to virtual resources allowing staff to communicate with military students no matter where they are. Implementation of this multi-faceted project will allow the VSC to address three of our main priorities: 1) increase the success of high-need student veterans; 2) enable more data-based decision-making; and 3) increase productivity by reducing down time and inefficiencies created by an inadequate infrastructure, which prevents students from accessing time-saving technologies. The VSC is requesting \$27,466 to purchase: four headphones; three iPads, one of which is for the PDC VSC; Sign-In Systems, Inc. software; twenty-five iClickers; four desktop computers and monitors; and five laptops, two of which are for the PDC VSC.

Challenge(s) this project will address:

Due to years of separation from an academic setting and the effects of multiple combat deployments, veterans are at risk of school failure. The VSC is requesting four headphones for veterans challenged by noise sensitivities stemming from their combat experience. The American Council on Education has determined tracking student veterans is critical to making data-driven decisions to ensure programs and services meet their needs; however, the VSC employs an outmoded system to track student veterans. To allow for better tracking of student veterans usage of the VSC and to gather feedback as to the services they most utilize and desire, the VSC is requesting three iPads (one for PDC) and Check-in Systems, Inc. software, which will allow for streamlined, detailed check-in information and management reports, and 25 iClickers to receive and analyze student veterans' feedback instantaneously. Military students are often faced with deployment or unexpected duty at which time they are disconnected from the university environment. The VSC will interact with military students and connect them to virtual resources that will allow for long distance interaction, reintegration and training for prospective and current students by purchasing five laptops (2 for PDC) with Webcams. The VSC Computer Center has reached capacity and, therefore, the center is requesting four desktop computer systems, two down view computer desks and four chairs to establish computer work stations in the group room for veterans to do homework and use while they are meeting with tutors and a laptop cart for secure storage.

Alternate solution(s) should this project not be funded:

Should this project not be funded, the VSC can continue to collect, tabulate and analyze information manually. However, policies restricting computer usage would need to be implemented, and the use of audio speakers would not be allowable. The VSC staff has been working with a university development director and a philanthropic grant specialist to learn about funding sources and to procure private donations and foundation grants to support activities. Staff has also familiarized themselves with online resources which publish announcements of competitive grants funded by federal agencies. The VSC staff will continually engage in securing new funding sources to ensure the sustainability of the VSC. In addition, the center solicits donations four times a year at specific VSC events. Staff is dedicated to providing the best services and resources to students and will make every effort at our disposal to implement the required technological devices that they need. Staff will also determine possible community partners by closely examining those relationships that would benefit from the research or services that the VSC provides and then involve those partners in future endeavors to share costs. Staff has also begun networking with colleagues in the field of veterans' education/affairs to learn about new funding opportunities. When attending conferences, staff listens closely to presentations and has created a list of agencies that have grant funded programs, staff visits those agencies' Web sites and then researches the funder's priorities to determine if they fit the VSC's mission.

Impact(s) if this project is not funded:

The VSC will continue to collect, tabulate and analyze information manually. Moreover, staff's outreach to students with specific needs will remain hindered because of poor log-in amenities. As the VSC's annual student visits continue to increase, students will have limited access to computers and the internet due to the high volume of students who use the computer center. Loud conversations in the center will continue to distract those who prefer a quiet personal space to effectively study. Because the VSC lacks webcams, staff will be unable to communicate with our military members who are deployed or on unexpected duty, leaving them isolated from the campus during these periods.

Cost: \$\$ (One time or recurring)

\$27,466.00 (one time)

What are your intended Process Outcomes and/or Student Learning Outcomes?

1. Increase access to VSC computer lab resources for student veterans. 2. Use technology resources to collect and analyze data in order to improve VSC services and maximize student learning on a quarterly basis. 3. Employ technology to enable deployed CSUSB students to remain connected to the campus community.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

1. Installation of four desktop computer stations in the group room and have five laptops available (2 at PDC) for student use during all hours of operation; track the number of students who utilize computer lab services, both cumulatively and at a given time. 2. Record of all programmatic improvements made to the VSC based on data collected via the implementation of Project Star Track (i.e., iPads, Check-in Systems, Inc., and iClickers) and the data-informed reasoning behind them. 3. Track the number of times deployed CSUSB students connect with the campus community and develop a questionnaire to determine whether or not those who utilized the webcams felt it helped them remain connected to campus.

Project Timeline Start: 07/01/2015 End: 06/30/2016 **First Quarter of Student Use** Fall 2015

Budget:

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SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

<u>Division</u>	Academic Affairs Campus Division	Alysha	College of Arts and Letters Timmons
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Total Amount Requested for FY 2015 **\$34,591.34**

Project Title: **Multimedia Language Center Computer Upgrade**

Project Abstract:

The Multimedia Language Center (MLC) of the Department of World Languages and Literatures serves over 2000 students per quarter by providing access to foreign language films, language software and learning tools to support instruction in 13 languages. The MLC also provides placement testing on SOAR Days and critical support to students in the Summer Language Intensive Programs. With the rapidly changing developments in technology, however, the equipment has not kept pace. We are requesting funds to purchase 31 Dell OptiPlex computers in order to provide students with increased access to better technology. This lab is used extensively by students and faculty using language focused instructional technology, as well as students taking placement tests, challenge exams, oral exams, and outcomes assessments. It has been over 8 years since new computers were purchased for our language teaching lab in UH-006; they no longer have the memory or processor speed to run the most frequently used software (and are painfully slow in performing even the most basic functions). Currently, it is not uncommon for a computer to stop working correctly, which reduces the number of workstations available to students until maintenance can be performed. We have selected computers that have increased memory without unnecessary frills so that they are reasonably priced at \$1,048.87 each (including monitor).

Challenge(s) this project will address:

Replace outdated student lab computers. Problems include, but are not limited to computers ceasing to function correctly or boot up due to various issues, including a lack of space on the hard drive. Over 100 different students may use one computer in a quarter. A profile for each student is saved when logging in causing the small hard drive to become full quickly.

Alternate solution(s) should this project not be funded:

If funding is not provided, we will continue to use the current computers. We will continue to delete the student profiles multiple times throughout a quarter to make space on the hard drive and minimize technical issues. Unfortunately, this increases the boot up time the next time a student logs in while their student profile is saved.

Impact(s) if this project is not funded:

Students will continue to use older equipment, resulting in longer times to complete work. In addition, the older computers may eventually cease to function before alternative funding is found.

Cost: \$\$ (One time or recurring)

\$34,591.34 (one time)

What are your intended Process Outcomes and/or Student Learning Outcomes?

1) Increased student use of services, including placement exams 2) Reduced waiting time for students taking assessments 3) Increased faculty use of services for classes and assignments

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

Measure 1) Lab Hour Reports reflecting student use of the Multimedia Language Center Measure 2) Report reflecting the number of student appointments for placement and other assessments Measure 3) Report of faculty scheduled reservations in the Multimedia Language Center

<u>Project Timeline</u>	Start: 07/01/2015	End: 09/18/2015	<u>First Quarter of Student Use</u>	Fall 2016
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Statements of support by collaborating organization(s) or department(s) (if applicable)

http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/206-c9e5e6c7a8bc88c9e44c8a9945106138_FrenchClubLetterofSupport.PDF

http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/204-c9e5e6c7a8bc88c9e44c8a9945106138_MDickersonLetterofSupport.pdf

http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/209-c9e5e6c7a8bc88c9e44c8a9945106138_Petitions+for+more+computers.PDF

Budget:

http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/207-5c1d88a5d225229854f3ec0c7625d745_Vital_Budget_Template_20151.xls


SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division	Academic Affairs		College of Natural Sciences
	Campus Division	Erik	Melchiorre

Total Amount Requested for FY 2015 **\$16,000.00**

Project Title: **Smart Board Enhancement for Visual Geoscience Learners**

Project Abstract:

This project will help visual learners in the traditionally visual-intensive geosciences. It should address ADA issues with microscope accessibility. Studies in geology necessitate understanding 3-dimensional aspects of geometry, optics, and topography. This requires significant instructor-student and student-student collaboration, with students spending much time in the laboratory and student study area outside of class hours. We request a mobile smart board system and microscope digital camera for classroom use. This system may be moved to other classrooms as needed. The camera can project microscope images onto the smart board. We also request a wall-mounted smart board for use by students in the keyed-entry study laboratory. This is a student-initiated proposal, facilitated by faculty. The smart board is a 65-inch touch-screen with object awareness. A balled fist erases objects, a smart pen draws objects, and a finger operates as a traditional mouse. Normal software (Adobe/Microsoft) can be used, as well as pre-loaded 3-dimensional imaging programs. The screen may be saved and e-mailed to students before being erased. Students can "peel away" 3-dimensional layers as needed to understand complex diagrams, save intermediate steps, and visualize in ways traditional chalk/whiteboards cannot. Examples of use include accessible/zoomable maps, instructor-guided practice sessions with students, improved ADA accessibility for microscopes through image projection, required senior thesis projects, student study with intermediate steps, and emailed results to groups. Students will learn better, and obtain skills desired by employers. This technology is virtually "plug and play" with a wireless communication link, and the vendor will provide required training.

Challenge(s) this project will address:

1) Create a positive learning environment for "visual learners" (those who learn best by seeing and doing in tandem). 2) Address future ADA accessibility issues with microscope camera and white-board projection. At present, students in a wheelchair cannot use microscopes the same as their peers. The mobile white board stand may be lowered for ADA accessibility. 3) Increase employability of our graduates, by exposing them to technology already in common use in the environmental, mining, and oil industries.

Alternate solution(s) should this project not be funded:

None. The requested amount is over 3x the annual Geology Department operational and maintenance budget of \$5000. If not funded, status-quo of low-impact learning is maintained.

Impact(s) if this project is not funded:

1) Possible liability for ADA compliance for microscope use in laboratory courses. 2) Reduced employability for our graduates. 3) Maintain status-quo of low-impact learning practices.

What are your intended Process Outcomes and/or Student Learning Outcomes?

1) CSUSB Institutional Student Learning Outcome 2 "Depth of Knowledge: Students will develop discipline-specific knowledge in geology (GEOL 320 Mineralogy, GEOL 321 Optical Mineralogy, GEOL 322 Geochemistry, GEOL 325 Petrology, GEOL 375 Hydrology). Students will learn 3-dimensional geology interpretation and mineral identification through visual learning. 2) CSUSB Institutional Student Learning Outcome 2 "Depth of Knowledge: Students will develop modern technology skills. 3) CSUSB Institutional Student Learning Outcome 4 "Scientific and Quantitative Reasoning: Students will use modern technology to address geologic problems in their course-specific assignments and term projects, and during their required senior project.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

1) It will not be practical to evaluate learning in all classes that will utilize this technology, as there are so many and the level of use will vary. Therefore, we propose to assess student learning in the two courses which will utilize this technology the most. Students will compile a portfolio of their work using the new technology in the classroom. This may include but not be limited to samples of their work, instructor handouts from "smart" white board, study session notes from camera-white board systems, and a short statement of how this technology did or did not assist their learning in the course. Assessment of how the technology may have supported student learning will be performed by comparing student involvement/performance with historical precedent. While surveys and usage counts may not always be the best measure of an outcome, it will be used in a targeted way in this specific project. User hours will be logged on each "smart" white board and the microscope camera, using a simple to install free application that logs time of use. Dr. Melchiorre, assisted by a student volunteer, will serve as coordinator for assessment. 2) Students and faculty will understand operation of the combined "smart" white board and microscope camera systems. This outcome will be measured by direct ability to operate the system, with follow-up training by vendor and/or faculty as required to master the skill. 3) The Geology Department has a long record of quantitative assessment of student performance in the required senior projects. It will be easy to compare this historical data to performance by students utilizing the requested technology.

Project Timeline **Start:** 08/03/2015 **End:** 08/01/2016 **First Quarter of Student Use** Fall 2015 (2015 Summer Session 2 if all goes well)

Statements of support by collaborating organization(s) or department(s) (if applicable)

<http://surveygizmolibrary.s3.amazonaws.com/library/196359/MatchingLetterMELCHIORRE.pdf>
http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/85-58c9953cb5ff82db6e3dc8314efe91fb_VTI+Grant+Supplement+Pages.pdf

Budget:

http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/89-0b79bc1406cea8e9c1142abe20ae4e26_Vital_Budget_MELCHIORRE.xls



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Palm Desert Campus (PDC) David Palm Desert Campus (PDC)
Maynard

Total Amount Requested for FY 2015 \$70,980.20

Project Title: Efficient/Personalized Computer Workstations for PDC/SBC Distance Learning Classes

Project Abstract:

The proposed project will upgrade RG-109, a 40 seat Distance Learning Lab at PDC, with modern equipment and technology that will provide a world class interactive, personalized learning experience for our PDC students. Funding will provide 40 student computer stations with an integrated all-in-one computer equipped with a HD touch screen monitor and a built in camera/microphone, computer hide-away desk and ergonomic chair. The integrated camera/microphones will makes it possible for students at different sites to communicate through the "magic" of two-way audio and two-way compressed video. Use of the student cameras, viewing monitors, and microphones at each location will allow superior instructor/student and student/student interactions. The computer workstation will allow for the rapid and easy transformation of the room from computer laboratory, to traditional lecture room, to distance learning room or to a conferencing center. Note that the Distance Learning Lab is equipped with a document camera, VCR, DVD player, audio cassette player, CD player, PC, and white board, all of which can be used to transmit computer files, videos, or audio programs between locations. This project will enhance and provide additional student access to technological resources and equipment needed in support all modes of modern classroom instruction. Feedback provided by the SLO's and KIP's assessment will be incorporated into the second -round, next generation of DL classroom up-grade planning.

Challenge(s) this project will address:

RG-109 currently uses dated technology and obsolete furniture. The workstations are 14 years old with the computer monitor buried within the computer workstation. Students are hunched over their desks viewing their computers through the glare of the glass table top, leading to fatigue during class. From the instructor's viewpoint, it can look like the students are sleeping, or reading their emails, or performing other non-class related activities. There is limited space to take notes. For better viewing or SSD needs, some students require the monitors to be reposition on the desk top, requiring extensive ITS tech set -up time. DL classes use one wall mounted camera with two room located microphones. Individual cameras and microphones will greatly improve visual and auditory student /student and student/faculty interactions. The ergonomically designed tables and chairs will allow greater flexibility in class delivery, more leg space and a generally more comfortable learning environment for students.

Alternate solution(s) should this project not be funded:

The Distance Learning Lab will continue to operate with the dated equipment and technology.

Impact(s) if this project is not funded:

Distance learning classes and classrooms are an integral part of students' academic life. If this project is not funded, these needs will not be fully realized.

Cost: \$\$ (One time or recurring)

One-time Funding: \$70,980.20 Recurring Funding: N/A Total Funding requested: \$70,980.20

What are your intended Process Outcomes and/or Student Learning Outcomes?

SLO 1: Provide an improved, comfortable learning environment for students enrolled in DL, hybrid and traditionally taught classes at the Palm Desert Campus. This includes evaluation of the desks, chairs and computer, and how they integrate into the DL/hybrid environment. SLO 2: Improve the visual and auditory quality of student/faculty and student/student interactions in DL/hybrid classes using individual camera/microphone/all-in-one computers. SLO 3: Provide a convenient, flexible space that can be quickly reconfigured from DL classroom, computer laboratory or traditional classroom setup.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

KIP 1: Survey/open forums on learning environment quality for students, instructors and ITS personnel using RG-109. Positive outcomes of this project will be incorporated into the next generation of upgrading PDC/SBC's distance learning classrooms (RG-107 and RG-105 at PDC) KIP 2: Survey/open forums on visual and auditory quality for students, instructors and ITS personnel using RG-109. Positive outcomes of this project will be incorporated into the next generation of up-grading PDC/SBC's distance learning classrooms. KIP 3: Survey/open forums for student/instructor/ITS personnel on space usage in RG-109. Positive outcomes of this project will be incorporated into the next generation of up-grading PDC/SBC's distance learning classrooms.

Project Timeline **Start:** 07/01/2015 **End:** 07/01/2025 **First Quarter of Student Use** Fall 2015

Budget:
http://surveyqizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/86-c094fc40a7dd26da60dcff8d0d222db4_PDC++Vital_Budget_20151.xls



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division	Academic Affairs		College of Social Behavioral Sciences
	Campus Division	David	Nimri

Total Amount Requested for FY 2015 **\$26,903.00**

Project Title: **Multi-Instructional, Research & Community Service Recording System**

Project Abstract:

The Community Counseling Center (CCC) has been training student marriage and family therapists and providing low-cost counseling services to the campus and the surrounding communities since 1973. The Infant/Toddler Laboratory School (ITLS) mission is to provide child care, offer research opportunities and provide learning experiences for students. Students can work directly with young children or watch via the observation room / recording system. Currently, both the ITLS and CCC rely on unreliable and antiquated VHS technology to record sessions of children interacting at ITLS and psychotherapy sessions conducted by student therapists with clients at the CCC. The age and state of the technology make recordings difficult to view and hear by the licensed clinical supervisors that provide crucial didactic feedback to the student therapists. Specifically, the outdated equipment has poor audio quality, disallows simultaneous observers and recording capability is limited to a single stream VHS recording device. There have been numerous instances where students videotapes have been unviewable due to poor video and audio quality. In addition, a number of our VCRs have malfunctioned and destroyed students' tapes. These limitations severely hinder the ability of ITLS staff to train students in child development, and reduce the number of students served. The poor performance of the old equipment severely limits the efficiency of IT staff, clinical faculty and students at the CCC and ITLS. We seek to replace the antiquated system with a managed digital NVR system which would benefit the CCC, ITLS and other research areas in the college.

Challenge(s) this project will address:

At the CCC, having access to a higher quality recording system for student sessions that meets the needs of current and future instructional standards in the clinical field will help solidify student success in the program and throughout their careers. Clinical supervision is an integral part of any training program for beginning therapists. Students and their supervisors rely on the recording of sessions to provide critical audio and visual information about the client (e.g., appearance, grooming, psychomotor activity, affect, nuanced aspects of psychological issues, etc.) and therapist (e.g., treatment technique, interpersonal qualities, appearance, comfort in the therapy room, etc.). At the ITLS, a new system will increase the number of students served (currently many students must go off-site for such experiences) as well as dramatically increase the quality of student learning. The opportunity to observe is integral to the learning experience for students in human development majors and other majors (e.g. nursing, kinesiology) who are interested in working with children. At both the ITLS and CCC, the poor audio/visual quality and the inability to cue up the VHS tapes to selected time periods in the sessions limits teaching effectiveness. Digital recording is the current accepted standard in providing clinical supervision. These recordings are a critical component of standard procedures in all clinical/counseling training programs across the nation. Session recordings are used for instructional purposes during group supervision, which usually consists of four students, and students also review their tapes independently and with their supervisor to evaluate and improve therapy skills.

Alternate solution(s) should this project not be funded:

Continued use of VHS technology until the equipment is no longer functional. This is already occurring.

Impact(s) if this project is not funded:

This project impacts at a minimum 425 students a year, not including community members that are served by the CCC. Other impacts include, inefficient use of supervision time rewinding and fast-forwarding tapes to attempt to ascertain what actually is occurring in session. Less feedback for student therapists from clinical supervisors. The ability of sharing recorded sessions for instruction is negated by the poor audio and video quality. Reduction of experience for campus clinical graduates and for students in all majors (e.g. human development, nursing, kinesiology) who are interested in working with children.

Cost: \$\$ (One time or recurring)

\$41,903 one time cost: 1) 26,903 requested from VTI 2) \$15,000 Matching funds have been allocated by the Department and the College.

What are your intended Process Outcomes and/or Student Learning Outcomes?

At the CCC: Students will be able to record their sessions and sessions will be viewable by the student and licensed clinical supervisor. Process outcomes include a) Increased efficiency in providing clinical supervision to student therapists b) Enhanced student satisfaction with recording system for improved learning. C) Reduced waiting time for students to cue VHS tapes to selected parts of the session Student learning outcomes include improved development of foundational counseling skills of empathy, reflection of affect, restatement, guided discovery, and use of specific therapeutic techniques. At the ITLS: 1. Students will be able to simultaneously observe both the infant and toddler rooms with sound capability. 2. Students will be able to observe and record observations of conversations between teachers and children and peer to peer interaction. 3. Students will be able to complete class assignments more effectively. 4. Students will be able to receive detailed feedback about their performance with young children. 5. Students will experience higher satisfaction regarding their experience at the ITLS. 6. Increased numbers of students from programs across campus will be able to use the observation room for class assignments.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

Process outcomes will be assessed using a student satisfaction survey. Learning Outcomes will be measured using supervisor ratings of student performance. Access analytics of video use.

Project Timeline	Start: 07/01/2015	End: 01/01/2016	First Quarter of Student Use	Winter 2016
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Budget:

http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/89-6bb188877cb679a73015cbe1dec8ddb0_Vital_Budget_ITLC_CCC_2015.xls



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division Academic Affairs Pfau Library
Campus Division Jonathan Smith

Total Amount Requested for FY 2015 \$52,372.77

Project Title: Innovation Lab

Project Abstract:

The library is the intellectual crossroads of the university, a place where students come to research, explore, and discover. It is in this spirit that we would like to establish an Innovation Lab that will encourage creativity and inquiry, facilitate cross-disciplinary collaboration, and promote true innovation. We envision an open lab where students can experiment with technologies through experimentation and free-play. The ability to rapidly prototype solutions will give students a greater understanding of real-world problems. In addition, the lab will be a safe space where students can learn to persevere in the face of failure - a skill central to lifelong learning and success in the 21st century. The Innovation Lab will bring together students of various disciplines and skill sets, naturally resulting in cross-disciplinary partnerships. We will host faculty-led workshops, student organizations, and more, and will promote participation in CSUSB and outside competitions that tackle real-world problems. The library will manage and provide space for the lab. We are asking for Vital Technology funds to purchase the technology needed to get the lab started. Technologies will include 3D printers and a supply of filament (printing material) - which will be of interest to disciplines as varied as Art, Computer Science, and Business. We would also like 3D scanners capable of both detailed and large format scanning. Circuitry kits using Arduino, RaspberryPi, and SparkFun will be used by advanced computer engineering students as well as those who have never even seen a circuit board.

Challenge(s) this project will address:

An open MakerSpace available to all CSUSB students regardless of discipline, skill set, or background. Cross disciplinary collaboration among students. Rapid prototyping for examining/testing ideas.

Alternate solution(s) should this project not be funded:

None.

Impact(s) if this project is not funded:

Project will not go forward.

Cost: \$\$ (One time or recurring)

One time \$48,493.31

What are your intended Process Outcomes and/or Student Learning Outcomes?

(1) (SLO) Students will learn to innovate through participatory learning, exploration, and the acquisition of new skills. (2) (PO) Students make use of the Innovation Lab facilities and technologies.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

(1) Innovation Lab will maintain a blog to showcase student work where students will be encouraged to share code, project plans, and lessons learned. Innovation will be assessed by the demonstration of students' ability to identify problems, attempt solutions, and learn from failure. (2) Statistics will be kept on lab usage. (2) Survey students quarterly during the first year regarding their satisfaction and to discover what technologies they would like to see in the lab.

Project Timeline Start: 07/01/2015 End: 09/11/2015 **First Quarter of Student Use** Fall 2015

Budget:

http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/204-757d0d38df14a7bfc76a5e154ceb1d2b_2015innovationbudget.xls



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division Academic Affairs College of Arts and Letters
Campus Division Alison Petty

Total Amount Requested for FY 2015 \$16,168.68

Project Title: Decal Printer for Ceramics and Glass Surfaces.

Project Abstract:

I am requesting a converted Ricoh SP 830 DN decal printer with supplies for two years, and a Mac computer with adobe cloud. This computer and printer will be located in the digital photo lab in the Visual Arts Complex. The location of the computer/printer will encourage a cross pollination of processes between the digital arts and ceramics/glass arts. With the addition of a decal printer, art students from all disciplines will have access to the professional process of full color image decal transfer. This system allows for digital images to be fused onto ceramics and glass. Bridging craft-based processes with photography and graphic design, this equipment will serve to broaden student’s exposure to innovative applications on ceramic and glass surfaces combined with strengthening their digital art skills. The use of this printer will assist students to make artworks that are more expressive, easily repeated, and ready for professional production, all with professional quality results. Enhancing the possibilities of surface decoration, this printer will not only improve student satisfaction in both the ceramics and glass areas, but also create interdisciplinary collaborations amongst students and faculty in the art department. As digital literacy becomes increasingly essential for professional artists, our curriculum requires multiple courses including: Digital Photography, Art & Technology, combined with many graphic design courses. This printer will serve to further develop digital skills in ceramics and glass classes, and could serve more than 500 students per year, both art and non-art majors.

Challenge(s) this project will address:

We currently have no means to produce digital images on ceramic and glass objects. Our only options are to hand paint, draw or create laborious screen transfer techniques that produce only black and white images. This printer would dramatically expose students to innovative possibilities for any digital image to be printed in full color in very high detail on ceramics and glass objects. These images would be viable and durable from functional objects to outdoor sculpture. This printer will unite art students from all disciplines including photography, painting and drawing, graphic design, ceramics, glass, sculpture, public art, along with the MFA students. It will allow for the ceramics/glass curriculum to become current within the field by covering projects in object surface design, and enhance applications with our public art production.

Alternate solution(s) should this project not be funded:

Our alternate solution to purchase this equipment is to request the printer through lottery funds. However, we have a list of over twelve items amounting to over \$45,000 in needed replacement equipment that is required before this printer request would be considered. This grant opportunity is our only means to attain this vital piece of equipment for use by all art students.

Impact(s) if this project is not funded:

The ceramics and glass programs will not be able to access this technology that allows digital arts to be united with the ceramics and glass surfaces. It is a serious deficiency in the art department, and this printer could serve as a bridge for collaborations between disciplines. Furthermore, it is now a relatively common piece of equipment in college art departments. Lacking this printer keeps the unnecessary divide between the hand made and digital that often marginalizes the art disciplines.

Cost: \$\$ (One time or recurring)

iMac 27" 3.5GHz i5 Ret 8GB 1TB Fusion	2299	Coyote Book Store	Adobe Cloud Complete Name, 48 months	1679.42	Converted Ricoh Sp 830 DN Printer	12995
Meridian Tile Products		Xrite Colormunki Calibration System	459	Supplies (Ink, Toner, Flux, Paper)	600	Subtotal 18032.42
Discount from printer supplier	-3000	New Subtotal	15032.42	Tax (8.25%)	1136.26	16168.68
Equipment	\$16,168.68					16 Estimated Total for all

What are your intended Process Outcomes and/or Student Learning Outcomes?

Enhancing student experience and exposure to innovative processes, students will be able to unite their digital art skills with their object making practice to create professional quality art and design. The goal is for all art students to be competent in digital literacy, and this printer will ensure students have the experience with this commercial art process. These skills are a key component to the Department of Art’s assessment plan. The outcome will be a dramatic increase in the quality of expression and digital literacy combined with a breadth of knowledge about industrial applications for ceramics and glass. This will impact all students in the Department of Art and potentially the University. The more that students have the opportunity to apply and advance their digital skills and understand the scope of this commercial production, the better equipped they will be as leaders in their field, as professional artists, designers, and educators.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

With this printer, computer, and adobe cloud, student’s artwork will dramatically change, and that will be demonstrated in their portfolios. We will also conduct a student satisfaction survey.

Project Timeline Start: 05/15/2015 End: 05/15/2019 **First Quarter of Student Use** FALL 2015

Budget:
http://surveyqizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/207-4be21d3b717796b21c38eeecce07c723_VTI+grant.xlsx

Division Academic Affairs Arturo College of Natural Sciences
Campus Division Concepcion

Total Amount Requested for FY 2015 \$117,160.00

Project Title: Software Development of Mobile Applications: Next Phase

Project Abstract:

The mission of the proposal is to enhance the software development skills of students in the software engineering course (CSE 455), which has a total of over 100 students combined in both the winter and spring sessions and about 20 Art students who are involved as graphics designers in the course. In particular, the course focuses on software development of mobile applications. We currently have a team of student interns, the Mobile App Development Team, supported by previous VTI grants, who are developing mobile apps for the campus and external entities. The interns are also actively assisting in the laboratory of the CSE 455 course. The goals of the grant are two folds: First goal is to provide CSE students the knowledge and training on how to apply software engineering principles and practices to the development of mobile app projects. The second goal is to enable CSUSB the capability to develop mobile apps to serve the needs of students and different offices /units of the campus. If there will be opportunities to develop commercial mobile apps for entities outside of the campus, then the revenue that might be generated could be used to support the Mobile App Development Team and possibly evolved this team into a mobile app development company within the university.

Challenge(s) this project will address:

There are various challenges this project will address: -- How to conduct the software engineering class so the students are not overwhelmed by the complexity and difficulty of developing mobile apps. The development of mobile apps involves the use of many kinds of technologies and languages depending on the app you are developing. Among them are: Phone Gap, Objective C, HTML, iOS, Android operating systems, Java, and JavaScript. So in addition to learning software engineering principles and practices, the students will need to know the above in addition to learning software engineering principles and practices . -- How to utilize the student interns talents and skills to guide and provide expertise to CSE 455 students who are learning mobile technologies and languages for the first time. The student interns must be supervised and appropriately assigned to a student team so they will be able to guide and help the team develop their mobile app project. The interns must select and assign trainings and tutorials from the Internet so that students will learn mostly on their own. The interns will also be the source of information any members of the team have any questions. -- How to keep the student interns additional work of maintaining current mobile apps and developing new ones. In addition to being experts and consultants in CSE 455, the interns are developing and maintaining current and new mobile apps. The 20 hrs/week of work may not be enough to do all their job with full-time study in their degree programs. -- How to maintain and keep all the mobile apps updated and respond to changes in the requirements, platforms, technologies, and upgrades to the mobile devices. There should be a scheduled plan on the maintenance of current mobile apps. Changing requirements, new operating systems, new mobile devices, and updated technologies and language add to the complexities of maintaining mobile apps. Thus we propose in this grant that interns be allowed to work up to 40 hrs/week during the summer months. -- How to choose promising mobile app projects that will lead to possible commercial products and thus obtain revenue. The choice of which mobile app project will lead to a successful commercial product will be a challenge. We propose that we develop the winning proposals in the IECE Pitch Competition for those ideas that will require mobile apps. In this way, the winners of this competition have already been evaluated as promising commercialization of their ideas.

Alternate solution(s) should this project not be funded:

If the mobile app project we are currently developing for an outside entity will be successful, it could generate the revenue we need to support the Mobile App Development Team for the next year. This project is under NDA and we cannot reveal its detail. See letter of support from Michael Edwards, CEO and Founder of the mobile app we are currently developing.

Impact(s) if this project is not funded:

If this project will not be funded by VTI and we are unsuccessful in generating revenue, the Mobile App Development Team will be dissolved. We would lose the expertise and capability of the campus to develop mobile apps for the students and offices. The software engineering course will lose a valuable asset in teaching this course. The student interns act as consultants and experts for students in this course to develop their own mobile apps. The university will lose an important asset in enhancing the education and training of CSE in the application of software engineering principles and practices to the development of mobile apps. The university will also loose the opportunity to launch a mobile app company that could generate revenue to the university and to the student interns who could potentially work as full -time software engineers.

Cost: \$\$ (One time or recurring)

The recurring budget will consist primarily of salaries for the 8 student interns making up the Mobile App Development Team. \$117,160.00 8 students = \$114,160.00 equipment = \$3000.00 Total budget =

What are your intended Process Outcomes and/or Student Learning Outcomes?

Process Outcomes. We plan to maintain current mobile apps that we have developed so far and continue to develop new mobile apps generated by the needs of the campus and other entities. This project will launch the Mobile App Development Team into a company capable of developing mobile apps for outside entities. If this happens, we will not need all the budget we are requesting. Student Learning Outcomes . The students in the software engineering course, CSE 455, which has over 100 students and about 20 Art students will have the knowledge and experience of developing software starting from the client requirements up to testing the prototype. They will also learn the technologies and languages that are used in mobile apps. This will be a valuable assets when the students will look for a job after graduation. The student interns of the Mobile App Development Team will be good candidates for finding a job as a mobile developer or continuing their studies into graduate program. See letter of support from Dr. Kerstin Voigt (Director, CSE) attesting to the importance of the knowledge and experience the students are having in the software engineering course.

**SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS****Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)**

For process outcomes, we currently have the following mobile apps being used in the campus and maintained by the Mobile App Development Team: 1. CSUSB Mobile 2. Tour CSUSB 3. C S U S B Advising 4. Coyote Radio 5. Rec Sports 6. RAFFMA 7. Slidewinder mobile game. The following mobile apps are being developed or near publications in Google Play and/or Apple App Store: 1. CSUSB Dining 2. ArrowHeart (Arrowhead Credit Union) 3. Red Folder (CSU Chancellor's Office) 4. BubbleShot mobile game 5. Mobile App Project under NDA We plan to continue the development of future mobile app projects: 1. Nicaragua Dental Clinic 2. Career Center 3. International Studies 4. Campus Safety 5. ResistorReader 6. RoomQuest 7. CSUSB Forms 8. Library Study Space 9. Parking Lot Wars mobile game 10. AlgorithmA We hope that we will establish a company within the University that will generate revenue to support the Mobile App Development Team. We have a letter of support from Dr. Michael Stull, Director of IECE, to have winners of the Pitch Competition, particularly those that require mobile apps, to seek us for assistance to develop their ideas into reality. For student learning outcomes, we will conduct a survey about the use of mobile app projects in the lab. The results will be analyzed if the students learn from the development of mobile apps and find the skills they acquire as useful.

Project Timeline**Start:** 07/01/2015**End:** 06/30/2016**First Quarter of Student Use**

Summer 2015

Statements of support by collaborating organization(s) or department(s) (if applicable)http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/211-918cd7d84e37fa359e1b30499431bb14_VTI_letter_CaseAide.pdfhttp://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/86-918cd7d84e37fa359e1b30499431bb14_VTI_letter_IECE.dochttp://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/84-918cd7d84e37fa359e1b30499431bb14_VTI_letter_Kerstin.pdf**Budget:**http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/206-d9a6e6bd4caa74585589412d8056fb92_Vital_Budget_Template_20151.xls



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division Academic Affairs College of Arts and Letters
Campus Division Alison Petty

Total Amount Requested for FY 2015 \$16,168.68

Project Title: Decal Printer for Ceramics and Glass Surfaces.

Project Abstract:

I am requesting a converted Ricoh SP 830 DN decal printer with supplies for two years, and a Mac computer with adobe cloud. This computer and printer will be located in the digital photo lab in the Visual Arts Complex. The location of the computer/printer will encourage a cross pollination of processes between the digital arts and ceramics/glass arts. With the addition of a decal printer, art students from all disciplines will have access to the professional process of full color image decal transfer. This system allows for digital images to be fused onto ceramics and glass. Bridging craft-based processes with photography and graphic design, this equipment will serve to broaden student's exposure to innovative applications on ceramic and glass surfaces combined with strengthening their digital art skills. The use of this printer will assist students to make artworks that are more expressive, easily repeated, and ready for professional production, all with professional quality results. Enhancing the possibilities of surface decoration, this printer will not only improve student satisfaction in both the ceramics and glass areas, but also create interdisciplinary collaborations amongst students and faculty in the art department. As digital literacy becomes increasingly essential for professional artists, our curriculum requires multiple courses including: Digital Photography, Art & Technology, combined with many graphic design courses. This printer will serve to further develop digital skills in ceramics and glass classes, and could serve more than 500 students per year, both art and non-art majors.

Challenge(s) this project will address:

We currently have no means to produce digital images on ceramic and glass objects. Our only options are to hand paint, draw or create laborious screen transfer techniques that produce only black and white images. This printer would dramatically expose students to innovative possibilities for any digital image to be printed in full color in very high detail on ceramics and glass objects. These images would be viable and durable from functional objects to outdoor sculpture. This printer will unite art students from all disciplines including photography, painting and drawing, graphic design, ceramics, glass, sculpture, public art, along with the MFA students. It will allow for the ceramics/glass curriculum to become current within the field by covering projects in object surface design, and enhance applications with our public art production.

Alternate solution(s) should this project not be funded:

Our alternate solution to purchase this equipment is to request the printer through lottery funds. However, we have a list of over twelve items amounting to over \$45,000 in needed replacement equipment that is required before this printer request would be considered. This grant opportunity is our only means to attain this vital piece of equipment for use by all art students.

Impact(s) if this project is not funded:

The ceramics and glass programs will not be able to access this technology that allows digital arts to be united with the ceramics and glass surfaces. It is a serious deficiency in the art department, and this printer could serve as a bridge for collaborations between disciplines. Furthermore, it is now a relatively common piece of equipment in college art departments. Lacking this printer keeps the unnecessary divide between the hand made and digital that often marginalizes the art disciplines.

Cost: \$\$ (One time or recurring)

iMac 27" 3.5GHz i5 Ret 8GB 1TB Fusion	2299	Coyote Book Store	Adobe Cloud Complete Name, 48 months	1679.42	Converted Ricoh Sp 830 DN Printer	12995
Meridian Tile Products		Xrite Colormunki Calibration System	459	Supplies (Ink, Toner, Flux, Paper)	600	Subtotal 18032.42
Discount from printer supplier	-3000	New Subtotal	15032.42	Tax (8.25%)	1136.26	16168.68
Equipment	\$16,168.68					16 Estimated Total for all

What are your intended Process Outcomes and/or Student Learning Outcomes?

Enhancing student experience and exposure to innovative processes, students will be able to unite their digital art skills with their object making practice to create professional quality art and design. The goal is for all art students to be competent in digital literacy, and this printer will ensure students have the experience with this commercial art process. These skills are a key component to the Department of Art's assessment plan. The outcome will be a dramatic increase in the quality of expression and digital literacy combined with a breadth of knowledge about industrial applications for ceramics and glass. This will impact all students in the Department of Art and potentially the University. The more that students have the opportunity to apply and advance their digital skills and understand the scope of this commercial production, the better equipped they will be as leaders in their field, as professional artists, designers, and educators.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

With this printer, computer, and adobe cloud, student's artwork will dramatically change, and that will be demonstrated in their portfolios. We will also conduct a student satisfaction survey.

Project Timeline Start: 05/15/2015 End: 05/15/2019 **First Quarter of Student Use** FALL 2015

Budget:
http://surveyqizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/207-4be21d3b717796b21c38eeecce07c723_VTI+grant.xlsx



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division Academic Affairs College of Social Behavioral Sciences
Campus Division Brett Goforth

Total Amount Requested for FY 2015 \$60,183.00

Project Title: Advanced handheld Global Positioning System (GPS) technology

Project Abstract:

Global positioning system (GPS) technology uses satellite-based radio networks to determine precise geographic locations anywhere on Earth, essential to mapping field gathered data. Students currently lack access to advanced handheld GPS technology among campus academic programs with common need to map field data using computer geographical information systems (GIS). GIS users needing advanced handheld GPS are linked through interdisciplinary curriculum in three Colleges (Social Behavioral Sciences, Natural Sciences, Business and Public Administration), including coursework, GIS professional certificates in the Geography Department and through extended education in the Leonard Transportation Center, and education outreach sponsored by the Water Resources Institute to recruit underrepresented students in science, technology, engineering, and mathematics (STEM). This project will acquire 25 Trimble Juno GPS receivers to upgrade the central computer lab supporting campus interdisciplinary GIS curriculum with 400 users, and broaden community STEM outreach efforts. Trimble Juno GPS provides the most accuracy possible by handheld receiver convenient for student use. Each receiver is a small tablet computer, with touch-screen color display showing digital maps, and photographs recorded by built-in digital camera. This technology will allow students to create maps for locations, paths, and areas delineating human and environmental features of landscapes. Trimble Juno GPS also allows students to edit digital maps using ArcPad GIS software. Our innovative pedagogical approach supports active inquiry by linking GPS technology to GIS curriculum, empowering students to collect data they subsequently view, interpret, and visualize as mapped information that reveals relationships, patterns, and trends. Affiliation: Geography Department, Social Behavioral Sciences.

Challenge(s) this project will address:

This project will address two challenges. Firstly, students lack access to advanced handheld GPS technology needed for course activities in campus GIS curriculum. Secondly, GIS curriculum requirements of high accuracy and high precision GPS technology need to be standardized for accessibility on campus through shared use of one advanced technology platform, such as the Trimble Juno GPS bundled with ArcPad mapping software that we propose to purchase. For example, in GEOG 306 Remote Sensing, students need to use GPS to complete a final project that requires mapping land cover shown on aerial photographs to interpret and classify patterns of land use in the neighborhoods surrounding campus. Advanced GPS technology will allow students to prepare and view maps while traveling in these neighborhoods, with capability to make corrections to their maps shown on the display, and download the field data with seamless integration onto classroom computers for analysis. In BIOL 319 Local Flora, a field activity requires students to locate as many species of plants in the campus nature preserve as possible in an hour of time for measure of biological diversity. A challenge for both the instructor and students is confirming the identity of species located in the field. Advanced GPS can allow students to not only map the location of a plant for follow-up visit, but also to take a digital photo of the plant and its surrounding habitat as a record of the occurrence to aid in species identification. In GEOL 391 Advanced Geologic Mapping, students currently construct maps of rock types, faults and other geologic features with pencil and paper in the field, and then return to the office to draft their final map by hand using cumbersome ink pens and colored pencils. The proposed acquisition of advanced handheld GPS technology will enable students to create their maps digitally in the field, and then digitally edit them back on campus to achieve their final product. This technology-centered method will save students much time as they prepare maps, and will give them experience that they will use on the job as this practice increasing becomes the industry standard. For the STEM outreach component, the Water Resources Institute is leading a campus initiative for K-12 recruitment and college STEM major retention of underrepresented students through training seminars and internship experiences to teach GIS with use of mobile technologies including GPS. It is a significant challenge to recruit and retain underrepresented students in STEM disciplines if they do not have opportunity to learn using advanced technology like Trimble Juno GPS to gain interdisciplinary experiences which provide marketable skills needed for highly competitive STEM careers.

Alternate solution(s) should this project not be funded:

Three alternate solutions are: 1) to have students map features the old-fashioned way by plotting locations on hardcopy maps, 2) ask students to provide their own advanced handheld GPS technology for activities, or 3) use basic handheld recreation grade GPS units available on campus that lack the mapping capabilities and accuracy of advanced handheld GPS. Alternative 1 does not meet modern industry standards for marketable skills in STEM disciplines. Mapping locations using ruler based measurements on hardcopy maps introduces tens to hundreds of feet of error in locating places, which is not acceptable for most GIS applications in the campus curriculum. Alternative 2 is cost prohibitive for students to purchase their own advanced handheld GPS. This technology is dedicated for specific purpose of mapping, unlike other general forms of mobile technology such as a smart-phone or tablet computer. Moreover, advanced GPS hardware requires software updates to maintain compatibility with classroom technology, which could not be effectively coordinated among hundreds of individual users. Alternative 3 is the current approach used by several campus programs. In our experience, students have lacked personal access to handheld GPS technology suitable for GIS curriculum, necessitating that campus programs provide access to the technology. The high level of accuracy needed excludes smart-phone GPS technology and other types of recreational grade GPS like the Garmin eTrex. Smart-phone GPS depends on reception of cell phone signal which typically have poor coverage in mountainous terrain surrounding campus in the natural preserve areas where many field activities are conducted. Recreation grade GPS is designed for purpose of navigation, and not to support field observation or recording data measurements in field surveys as is needed. However, in the absence funding to purchase advanced handheld GPS technology, programs currently rely upon recreation grade GPS out of compromise because it is not expensive. For example, the Geography Department currently utilizes a set of 24 Garmin eTrex GPS units that are a decade old, nearing the end of operational lifespan (30 were originally purchased, 6 now out of service). Recreational grade GPS like the Garmin eTrex is less accurate than advanced GPS technology, giving location errors in the range of tens to hundreds of feet. Recreational grade GPS also does not allow students to view and edit digital maps for GIS use, nor have capability to directly interface with desktop computer GIS software. Instead, students must transcribe hand written notes for the coordinates of locations, which are later entered into spreadsheets in the computer lab and imported onto digital maps using multiple software processes. This procedure often introduces rounding errors in the decimal coordinates for locations, and transcription errors from written data. Another limitation is that mapped paths and boundary data cannot be imported for use with GIS software. In summary, a lack of funding for advanced technology has forced campus programs to shoehorn the wrong tool for the job.

Impact(s) if this project is not funded:



SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

The available alternate solutions do not provide current GPS technology standards of high precision and accuracy needed for training students in GIS curriculum, nor do they meet our goals for strengthening outreach in highly competitive STEM disciplines. We have been unable to obtain funding from other sources, so rejection of this grant proposal would foreseeably result in no upgrade to student access for advanced GPS technology. In the short-term, a lack of investment in advanced handheld GPS technology will inhibit development of new GIS curriculum for courses. The CSUSB Water Resources Institute risks less exposure of underrepresented students to advanced technology in STEM outreach efforts. In the longer term, programs that depend upon older GPS equipment risk eventual loss of student access to this technology as currently used hardware nears the end of operational use.

Cost: \$\$ (One time or recurring)

One time cost of \$60,183. Matching Funds, Source: College of Social Behavioral Sciences, Amount: \$10,000

What are your intended Process Outcomes and/or Student Learning Outcomes?

Some examples of "process outcomes" resulting from advanced handheld GPS technology upgrade to campus interdisciplinary GIS curriculum include: Process Outcome 1. Increased student use of GPS technology in GIS curriculum Process Outcome 2. Increased student enrollment in GIS curriculum Process Outcome 3. Growth of interdisciplinary GIS curriculum on campus Process Outcome 4. Increased STEM outreach for GIS training on campus. Process Outcome 5. Improved workflow for GIS lab activities that utilize GPS field data. Process Outcome 6. Expanded use of advanced GPS for research by students and faculty. Process Outcome 7. Greater student satisfaction with access to industry standards of technology for GIS curriculum and STEM outreach. Some examples of "student learning outcomes" for the incorporation of advanced handheld GPS technology in courses include: Student Learning Outcome 1. Understanding of how GPS functions and the practical limitations as considerations for planning when and where to use it. Student Learning Outcome 2. Successful application of GPS in discipline specific field surveys by gathering data and importing data into GIS for analyses. Student Learning Outcome 3. Proficiency in cartographic skills for presentation of data collected by GPS. Student Learning Outcome 4. Critical interpretation of maps showing information summarized from GPS surveys.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

An assessment plan will track multiple key performance indicators for student learning and process outcomes including the following: Process Outcomes 1-4. We plan to track use of GPS by number of students, classes, curriculum activities, and dates of use, as well as University registration records for GIS-related course enrollment and GIS certificate completion trends. Process Outcome 5. Improved workflow for GIS lab activities that utilize GPS field data will be verified by redesign of lab procedures to include streamlined processes for downloading GPS data onto desktop computers in the lab. Process Outcome 6. Student and faculty use of advanced GPS technology for research will be profiled by survey of users, references to conferences, and publications supported by the project, including preparation of a portfolio of student projects and faculty research showing how advanced GPS technology was applied. Process Outcome 7. Student satisfaction with access to industry standards of technology for GIS curriculum can be measured by survey of student opinions of GPS technology conducted in self-study oriented Senior Seminar courses where a portfolio of completed course work is reviewed in response to questionnaire, for example, GEOG 500 Senior Seminar. Student learning outcomes 1-4 will be assessed using course rubrics for culminating exercises utilizing advanced GPS technology applied to experiential skills gained throughout the quarter in GIS curriculum. The assessment plan will include preparation of a portfolio of lesson plans showing how advanced GPS technology was utilized for instruction, and where applicable, by comparison of student grades/quality of work on related course activities before and after introduction of the technology.

Project Timeline

Start: 07/15/2015

End: 06/30/2016

First Quarter of Student Use

Fall 2015

Budget:

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SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division	Academic Affairs	Undergraduate Studies
	Campus Division	Cecil
	Maggie	

Total Amount Requested for FY 2015 **\$100,000.00**

Project Title: **CSUSB Writing Centers Collaborative Support Initiative for English Language Support Center, CSUSB Palm Desert Writing Center, and CPBA Business Writing Resource Center**

Project Abstract:

Three different areas of need on this campus and the Palm Desert campus are addressed in this project. First, the CSUSB Writing Centers, heavily impacted by the currently unmet need for international student language support on campus, would partner with and provide a shared space for the proposed English Language Support Center in the Graduate Writing Center's current location, CE 311. Dr. Caroline Vickers, a faculty member with expertise in Second Language Acquisition and Teaching English as a Second Language, will provide supervision of the ELSC and specialized training for graduate students studying on the Linguistics Track in the MA in Composition who wish to work there. Equipment requested for this portion includes 5 iMacs, 5 foot pedals for listening to recordings, 5 work stations; personnel requests include faculty reassigned time for curriculum development and supervision of graduate students. Second, the satellite CSUSB Writing Center in JB 462, which serves primarily writers in the College of Business and Public Administration, is under the general direction of Maggie Cecil, with direction of day-to-day activities and tutor mentoring under Melissa Bakeman; equipment requested includes 3 laptop computers; personnel requested includes 40 hours per week of ISA time. Third, the Palm Desert Campus needs a Writing Center in order to provide its students access to the same high-quality, on-site resources that are available on the main campus. Equipment requested for that campus consists of 4 iMacs; personnel requested are three GSA tutors and a half-time director, hired in as an SSP II.

Challenge(s) this project will address:

English Language Support Center: Challenges that international students whose first language is not English face when enrolling in any U.S. university include adapting to a new academic culture and of course using English as a second language for academic purposes. Although these international students are advanced users of English upon their enrollment at CSUSB, they need specialized English language support to increase their success. The CSUSB Writing Centers are perhaps most impacted by the lack of international student language support on campus. International students whose first language is not English who are seeking language support frequently turn to the Writing Center because they have no other alternative. However, Writing Center tutors are not trained to provide English as a Second Language (ESL) support, so the Writing Centers are overwhelmed trying to meet a need that is not in their purview. Additionally, international students are left with insufficient support. The proposed ELSC can meet the needs of international students whose first language is not English by employing graduate students who are studying Applied Linguistics and Teaching English as a Second Language as tutors under the supervision of Dr. Caroline Vickers, a faculty member with expertise in Second Language Acquisition and Teaching English as a Second Language. Addressing these challenges will provide the following language support:

- a. Academic listening and speaking skills b. Second language reading and vocabulary c. Pronunciation d. Assistance with lectures and note taking e. Plagiarism and textual borrowing conventions f.

Software that allows students to work independently and with tutors The CPBA BWRC addresses the needs of business students who are looking for assistance in developing or revising projects specific to their majors. The laptop computers will provide jointly viewable screen areas for tutors and students to obtain maximum collaborative benefit as they edit and revise their work in this collaborative environment. The need for a Writing Center on CSUSB's Palm Desert campus has been apparent for more than a decade. Students who attend that campus are at an extreme disadvantage as far as their access to the same quality resources in writing support that their counterparts on the main campus have. A satellite Writing Center, sufficiently staffed and equipped, addresses this challenge and provides the basis for ongoing support and growth necessary for an expanding campus.

Alternate solution(s) should this project not be funded:

Alternate solutions do not exist at this time, beyond perhaps some minimal piecemeal funding of various parts of the whole. The CBPA BWRC exists currently without equipment; the ELSC is acutely needed but lacks funding from other sources; the PDC Writing Center will need equipment and dedicated space before it can become a reality. It is our goal, in submitting this as a collaborative project, to obtain equipment specific to the needs stated here; our hope is that ongoing funding of ISA and GSA tutor time to maintain the project(s) will be much less complicated to establish.

Impact(s) if this project is not funded:

Things will, by necessity, stay pretty much as they are. CSUSB students will not be served as well as they could be, and resources for writing assistance and support will continue to be less than ideal.

Cost: \$\$ (One time or recurring)

One time, approximately \$100,000; recurring costs would be for personnel, and as noted above we believe those costs can -- and should -- be absorbed by the various colleges and departments for whom we are requesting this equipment, e.g. the College of Business and Public Administration (CBPA BWRC), the Department of English (ELSC), and Undergraduate Studies (PDC Writing Center).

What are your intended Process Outcomes and/or Student Learning Outcomes?

SLO 1. International and multilingual students will improve their academic listening and speaking skills, their second language reading and vocabulary, and their second language pronunciation abilities SLO 2. International and multilingual students will receive assistance with lectures and note taking SLO 3. Students will become familiar with plagiarism and textual borrowing conventions; participate in "Avoiding Plagiarism" workshop SLO 4. Students will develop the ability to communicate effectively through writing and will improve critical thinking skills in the context of academic writing

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

KPI 1. A quarterly survey, prepared in Survey Monkey, and sent out to the email addresses provided by students when they sign in to use the ELSC, allowing students who used the ELSC to assess how it contributed to success in their courses. KPI 2. A student survey in which students evaluate improvements in their ability to understand lectures and take satisfactory notes. KPI 3. End-of-workshop quiz on student learning. KPI 4. Develop mechanism to obtain professor feedback on student learning, working collaboratively with TRC and other on-campus resources.

Project Timeline **Start:** 08/03/2015 **End:** 06/30/2016 **First Quarter of Student Use** Fall 2015

Statements of support by collaborating organization(s) or department(s) (if applicable)

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Budget:

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SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division	Academic Affairs		College of Education
	Campus Division	Connie	McReynolds

Total Amount Requested for FY 2015 \$74,000.00

Project Title: Clinical & Assistive Technology Expansion Phase II – Improving Performance of Academically At-Risk Students

Project Abstract:

The scope of this project is to improve educational performance of academically at-risk students, including veterans, by addressing the underlying neurological conditions using cognitive rehabilitation therapy (aka neurofeedback). Using neurofeedback, students who experience auditory and/or visual processing deficits, as well as attention, concentration, memory and focus difficulties can learn to train their brain for better functioning. Current interventions alone (i.e., tutoring, counseling) have limited effectiveness if the underlying causes go unidentified and untreated. By treating the underlying causes, improvements in brain functioning will ultimately lead to better classroom performance and enhanced academic outcomes. In addition, the scope of this project includes providing students with severe types of disabilities (i.e., ALS, Cerebral Palsy, brain injuries, spinal cord injuries, etc.) access to advanced assistive technology (i.e., EyeGaze). This technology empowers individuals with severe physical limitations to be able to communicate using only their eye-movements, providing equal access to academic opportunities and closing a gap that exists for some of our more physically challenged students. The funding will be used to expand the use of neurofeedback interventions and assistive technology. Graduate students will be trained in the use of these interventions that can be applied to a wide variety of future employment settings. Secondly, these identified interventions will uniquely situate this campus with state-of-the-art technology designed to address some of the underlying causes of poor academic performance. Ultimately, the goal of this project is to improve academic performance thereby enhancing student retention and student graduation rates.

Challenge(s) this project will address:

The project is designed to address low retention and graduation rates. Some of the causes of poor student academic performance include auditory and/or visual processing deficits, as well as attention, concentration, memory and focus difficulties. Research has demonstrated that when interventions are applied in the proper order better outcomes are the result. By treating the underlying causes, improvements will ultimately lead to better classroom performance and enhanced academic outcomes positioning CSUSB as one of the only universities in the country involved in this type of academic intervention.

Alternate solution(s) should this project not be funded:

The only alternative solutions should this project not be funded include seeking funding from external grant providers such as state and federal government and private industry.

Impact(s) if this project is not funded:

The impact will be continued poor classroom performance, which leads to unacceptable retention and graduation rates of academically at-risk students.

What are your intended Process Outcomes and/or Student Learning Outcomes?

Successful completion of neurofeedback intervention of academically at-risk students will result in: 1. Improved GPA 2. Reduced drop-out rates 3. Improved graduation rates

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

Successful completion of neurofeedback intervention of academically at-risk students will result in (1) improved GPA, (2) improved retention rates, and (3) improved graduation rates. Student data will be measured over a three-year period of time and compared to academically at-risk students who did not participate in the neurofeedback interventions.

Project Timeline **Start:** 08/01/2015 **End:** 06/30/2019 **First Quarter of Student Use** Fall 2015

Budget:

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SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division Academic Affairs
Campus Division Glen College of Arts and Letters
Dunzweiler

Total Amount Requested for FY 2015 \$101,000.00

Project Title: Theatrical Lighting Augmentation and Replacement

Project Abstract:

The Theatre Arts department and its requisite performance spaces are equipped with theatrical lighting instruments that have run their life span. Time and money spent repairing these fixtures has begun to outweigh the inherent worth of the instruments themselves. These lights need to be replaced. Along with this, our equipment needs to represent equipment out in the workplace so as to give our students the experience necessary to remain competitive once they graduate. Below is a proposed package of lighting equipment which fulfills both needs.

Number	Fixture	Cost per Fixture
10	ETC Source Four ERS 36 Degree	\$330.00
4	ETC Source Four ERS 26 Degree	\$330.00
4	ETC Source Four ERS 19 Degree	\$330.00
2	ETC Source Four ERS 26 Degree	\$270.00
2	ETC Source Four 5 Degree Lens	\$345.00
20	ETC Color Source Par	\$266.39
6	Martin Mac Quantum Wash	\$505.62
6	Martin Mac Quantum Profile	\$6,820.00
2	Club Spot	\$1718.50

Challenge(s) this project will address:

The purchase of this equipment will allow students to work on and see lighting technology that is functional and is currently being used in the commercial world which they will be facing after graduation.

Alternate solution(s) should this project not be funded:

Should this project not be funded, the Theatre Arts Department would need to secure funding from another source in order to replace lighting instruments. The advantage to this project is that it could get funded partially and still succeed. Firstly, the instruments that need to be replaced could get funded. Also the quantity could get reduced for each fixture. A lighting package that could help The Department could be worked out at multiple price points.

Impact(s) if this project is not funded:

The lighting equipment in the Theatre Arts Department is slowly falling apart and becoming obsolete. Every year that the equipment remains the same increases the distance between what we can teach the students on campus and what the students need to know once out in the commercial world.

Cost: \$\$ (One time or recurring)

This equipment is expected to have a life span of at least 10 years. Some of the lights without computers in them will arguably have a life span of more than twenty years. This is equipment that, by design, requires minimal upkeep. I see this as a one time purchase. However, this purchase will not come close to replacing all of the lighting equipment used by the Theatre Arts Department. We currently have an inventory of other theatrical lights that are in less critical shape. Those too will someday need to be replaced and/or upgraded. It would be nice to have a recurring budget, but it is not necessary to upkeep the initial equipment specified in this proposal.

What are your intended Process Outcomes and/or Student Learning Outcomes?

Process Outcomes: All involved (instructors, employees, and students) will spend less time repairing lights or not having lights work for class and/or production. Student Learning Outcomes: Students will learn and experience new lighting technology. Previously existing technology will work properly.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

Measures of Outcomes: Process Outcome Measures Time logged repairing equipment will reduce. Productions should have reduced problems with lighting equipment and this can be measured by a reduction of lighting notes in the production reports. Measure of Student Learning Outcomes: Time presenting with functional equipment will increase. Students will get more time successfully using the equipment. This could be measured in class evaluations from the students.

Project Timeline Start: 07/01/2015 End: 09/01/2015 **First Quarter of Student Use** Fall 2015

Budget:
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SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division Academic Affairs Office of Student Research
Campus Division Cheryl Quiroz

Total Amount Requested for FY 2015 \$39,317.84

Project Title: The Institutionalization of HIP Undergraduate Research and Creative Activities

Project Abstract:

In fall 2013, the Office of Student Research (OSR) received a Chancellor’s Academic Student Success Program grant to expand HIPs practices. The grant was used to implement a: Peer Research Consultant Program, Peer-Lab Program, Summer Research Program, and Course Redesign. Additional funding would support technology for optimum student engagement. A Laptop Lending Program would support participants in the programs listed above. Unlike the Library’s lending program, student participants would keep the laptop for the entire quarter. Laptops would be loaded with SPSS software used for statistical analysis. Peer Leaders would use laptops to communicate, collaborate, and support students in lab sessions. Summer Research Program participants would use laptops for research, statistical analysis, collaboration and presentations. We are requesting funding for 10 laptops. Training videos would be developed. Peer Leaders must attend two full days of training. It is difficult to find a time when all can attend; online training would allow students to view trainings when convenient and boost participation. We would develop five videos through Creative Media Services. Funding is requested for an Electronic Information Board. We will purchase a monitor and Apple TV to display upcoming events, deadlines and program information in the OSR office. OSR implements many complex programs and grants; a monitor would greatly improve communication. Finally, funding will provide a student assistant during the 2015-2016 academic year. The student assistant would help coordinate video production and create resource manuals on OSR programs. The manuals are vital to capturing program processes and insuring program consistency.

Challenge(s) this project will address:

No Challenges

Alternate solution(s) should this project not be funded:

Should this project not be funded, OSR will not be able to support student scholars with additional lap tops and communications will be impacted.

Impact(s) if this project is not funded:

An estimate of 2,049 students will be impacted annually if the laptop lending program, training videos and OSR Electronic Information Board are not implemented. Students will be hindered in the quality of research they will perform. Since conducting research has lifetime benefits, students will not be able to refine their communication skills, enhancing their resume and developing critical thinking skills. Training costs will remain high and not all Peer Lab leaders will be trained. We will continue to rely on print communications. Additionally, the office and 1 student assistant would be impacted due to not having the support needed to implement new projects and improve the quality of programs. The student assistant will not be able to improve their professional development through employment with the office

Cost: \$\$ (One time or recurring)

Laptop Lending Program-One time Training Videos-One time Electronic Information Board-One time Student Assistant-One time

What are your intended Process Outcomes and/or Student Learning Outcomes?

Laptop Lending Program Outcome 1: Process and learning outcome: Laptops will allow Peer Leaders to communicate more effectively, improve group collaboration, prepare for lab sessions, and develop presentations. Summer Research Program participants will collect, organize, analyze and evaluate data and make well organized presentations. Laptops allow greater mobility, which will improve collaboration with peers and faculty and increase communication. Training Videos, Outcome 2: Process outcome: Online training will reduce training costs, while boosting participation. Peer Leaders are required to attend 48 hours of training. Training costs \$11, 520 per year. Each year, some students miss portions of the training due to scheduling conflicts. This creates additional work and expense, since OSR staff must follow -up with them. Online training gives students the flexibility to take trainings when convenient, increasing participation. OSR Electronic Information Board Outcome 3: A monitor displaying information on upcoming deadlines and programs would improve communication with campus. The OSR implements a number of grants and programs, as well as the campus-wide Student Research Symposium and the CSUSB Student Research Competition. A monitor displaying OSR deadlines, program information, and other specifics would greatly improve communication and free up the OSR employee’s time to focus on implementing projects. Student Assistant Position Outcome 4: A student assistant would ensure that video production is completed in a timely manner and runs smoothly. Program manuals would capture valuable information and processes and would be available as a reference for years to come.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

To evaluate outcomes 1, 2, 3 and 4, OSR will use direct and indirect assessment measures. For outcomes 1 and 2, direct assessments will be collected comparing students participating in the programs. OSR already implements program assessment via surveys, grades, and GPA for Peer Lab/Peer Consultant and Summer Research Programs. OSR program participants are expected to show improved academic achievement measured by GPA. Preliminary studies performed with Institutional Research show significant GPA changes among students in OSR programs. Indirect assessment will be used to evaluate self-reported improvements in intellectual, practical skills, personal growth, and curriculum changes. Finally, OSR will evaluate students’ presentation skills during the summer conference using rubrics similar to those of the CSU research competition. Presentation skills are important, as most employers request shortlisted job applicants to deliver presentations during their interviews. Working with Institutional Research, OSR will conduct a study following the progress of OSR program-involved students. Data will include GPA, time-to-degree, graduate education plans, and demographics. OSR will compare students’ opinions by surveying courses, both with and without peer leaders. Surveys will be administered at the beginning and end of the quarter. The success of outcome 3 will be measured by improved communication between OSR and students, and a decrease in time OSR staff members spend on this task. To measure effectiveness, OSR program participants will be asked about OSR and how they heard about the program. Student assistant position outcome 4 would be measured by the completion of tasks and the quality of student work.

Project Timeline Start: 09/01/2015 End: 06/01/2020 **First Quarter of Student Use** Fall 2015

Budget:

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SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

<u>Division</u>	Academic Affairs Campus Division	John	College of Arts and Letters Mumma
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Total Amount Requested for FY 2015 \$26,199.00

Project Title: Logic Lab Computer Upgrade

Project Abstract:

The Logic lab provides support for students developing their critical thinking skills in courses offered by the philosophy department. This support has two components: tutoring from undergraduate lab assistants, and computer- aided instruction. Student Success Initiative funds have already been allocated for the former component. We (i.e. the philosophy department) are requesting a VTI grant for the latter component. Specifically, we are requesting funds to replace the 16 eight-year-old iMacs in the Lab. The lab serves all students enrolled a philosophy course (3,500 in number). The core group that uses the logic lab are the students enrolled in Phil 200. Phil 200 is a logic course that satisfies the general education critical thinking requirement. The lab computers run software that allow students to ascertain the validity of their proofs from their Phil 200 classes.

Challenge(s) this project will address:

Increasing critical thinking skills of CSUSB students

Alternate solution(s) should this project not be funded:

Students will continue to use eight-year-old computers.

Impact(s) if this project is not funded:

The educational benefits students receive from the software of the lab are now hindered by the slow running time of the computers and other technical problem s due to the age of the computers. Without the proposed improvements, these hindrances and difficulties would continue.

Cost: \$\$ (One time or recurring)

One time cost of \$26,199.00 for 16 new imacs (21.5" 2.9 ghz)

What are your intended Process Outcomes and/or Student Learning Outcomes?

Outcome 1 (process): students will experience increased satisfaction in their use of the Logic lab computers for computer aided instruction. Outcome 2 (student learning): students will increase their critical thinking skills by developing an ability to evaluate the sentential validity of an argument. Outcome 3 (student learning): students will increase their critical thinking skills by developing the ability to construct arguments within the natural deduction system.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

It is difficult to measure directly the impact of the Lab, as we would have to implement a control group who didn't utilize the Lab. However, we have three ways of indirectly measuring the impact of the lab. Measure 1, providing evidence for outcome 1: we will have sign in/signout sheets where students report their satisfaction or dissatisfaction with the lab equipment. Measure 2 providing evidence for outcomes 1, 2 and 3: we will give a survey to Phil 200 students at the end of the course asking them how much time they spent working in the lab, how they rate the performance of the lab computers, and the how they rate the impact of the lab software in their learning. Measure 3, evidence for outcomes 2 and 3: for individual respondents to the survey, we will evaluate the quality of his or her work evaluating sentential validity and constructing arguments in natural deduction on the Phil 200 final exam. This will allow us to compare a student's time spent working in the lab with his or her level of critical thinking skills at the end of the course.

<u>Project Timeline</u>	Start: 09/16/2015	End: 06/17/2016	<u>First Quarter of Student Use</u>	Fall 2015
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Budget:
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SVTI-STUDENT VITAL TECHNOLOGY INITIATIVE 2015-2016 PROPOSALS

Division Academic Affairs
Campus Division Ian College of Business and Public Administration
Jacobs

Total Amount Requested for FY 2015 \$10,000.00

Project Title: CBPA raspberry pi

Project Abstract:

Checking out Raspberry Pi's to students each quarter to allow for hands-on experience of computing. The Raspberry Pi' is a low cost, credit-card sized computer that plugs into a computer monitor or TV, and uses a standard keyboard and mouse. It is a capable little device that enables people of all ages to explore computing, and to learn how to program in languages like Scratch and Python. It's capable of doing everything you'd expect a desktop computer to do, from browsing the internet and playing high-definition video, to making spreadsheets, word-processing, and playing games

Challenge(s) this project will address:

Student are not receiving much Hands-on with technology except when in the classroom, this project will allow student to take home the equipment and receive the hands-on pass the classroom environment.

Alternate solution(s) should this project not be funded:

There is no alternative to this solution, maybe fin funding somewhere else.

Impact(s) if this project is not funded:

This project would be a new concept for CBPA there would be no impact for students, we would continue to teach in the same way.

Cost: \$\$ (One time or recurring)

one time cost of \$100 each PI coming to \$10,000

What are your intended Process Outcomes and/or Student Learning Outcomes?

Outcomes are student would not have more skills with technology then before, student learning outcomes would very between programming to home servalance systems using the raspberry pi.

Assessment Plan and Key Performance Indicators (KPI) (Measurable/Verifiable)

Measure 1: Students understanding of technology Outcome 1: student test scores would increase

Project Timeline Start: 09/01/2015 End: 09/10/2015 **First Quarter of Student Use** Fall 2015

Budget:

http://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/196359/1952800/206-c175d371fd26f1be7fca588937365f32_Vital_Budget_Template_20151_CBPAraspberrypianJacobs.xls