<table>
<thead>
<tr>
<th>Document Code</th>
<th>Department</th>
<th>Description</th>
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<tbody>
<tr>
<td>2016-101</td>
<td>(Arts)</td>
<td>TVR/Multimedia Lab Upgrade</td>
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<tr>
<td>2016-78</td>
<td>(Arts)</td>
<td>Studio Pedestal Proposal</td>
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<td>2016-117</td>
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<td>2016-75</td>
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<td>2016-97</td>
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<td>Digital Art Labs Shared Equipment Upgrades</td>
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<tr>
<td>2016-88</td>
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<td>Classroom Technology Digital Cinema Packages Beginning to Advanced Digital Filmmaking Camera Packages, Transitioning from Celluloid to Digital Cinema</td>
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<td>2016-90</td>
<td>(Arts)</td>
<td>Cinematic Upgrade to Support SMART Podium Classroom Support Technology Bringing our Technical Equipment up to the level of our SMART room technology</td>
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<td>2016-86</td>
<td>(Arts)</td>
<td>ETC Ion Lighting Console and Fader Wing</td>
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<tr>
<td>2016-89</td>
<td>(Business)</td>
<td>Enhancing Student Career Opportunities Using Bloomberg Terminals</td>
</tr>
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<td>2016-104</td>
<td>(Education)</td>
<td>Kodak PlayTouch Video Camera (Black)</td>
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<td>2016-71</td>
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<td>Replacing the 24 Laptops for Teaching</td>
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<td>Additional TV, 5201 James</td>
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<td>2016-70</td>
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<td>Information Technology for the General Chemistry Laboratory: Automated Data Acquisition</td>
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<td>2016-106</td>
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<td>Teaching tools for large lecture halls</td>
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<td>(Science)</td>
<td>Tablet-based research and documentation stations for the Microbiology lab</td>
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<td>2016-74</td>
<td>(Science)</td>
<td>Promoting Technology based Experiments in General Physics II Laboratory</td>
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<td>Overhead Projection for food lab</td>
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<td>2016-73</td>
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<td>in classroom genetics useing dissecting microscopy with wifi camara</td>
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<td>2016-99</td>
<td>(Student Services)</td>
<td>The Bulldog Connection</td>
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<td>2016-120</td>
<td>(Admin)</td>
<td>Expand Cell Phone Amplification System</td>
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<td>Assitive Technology for the Center for Student Disability Services</td>
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<td>Computers for Classroom 384 Library</td>
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Student Technology Fee Proposal #2016-101
TVR/Multimedia Lab Upgrade

School: School of Visual, Media and Performing Arts
Department/Office: Television and Radio
Applicant Name: Cheong, Young
Additional Applicant(s): Maclelland, Stuart
Primary Contact for Proposal

Email Address: CYOUNG@BROOKLYN.CUNY.EDU
Phone: 7189515555
Estimated total cost: $ 23,247.00

Description of Proposed Project:
We, here at the Department of Television and Radio, are requesting a replacement of 7 old MacPro workstations in our Multimedia Lab with new Mac Pro workstations. Most of our lab computers have been heavily used and because of its flawed design, most of MacPros cannot connect to slow external hard drives. This affects our students who expect to work off of his or her hard drive. We also need the technology to follow the current 4K and High Definition video editing demands that we have implemented into our curriculum.

The old MacPro in the Multimedia Lab, in general, cannot readily meet the demands of broadcasting-quality 4K and HD video footage. In the past, we have only allowed access of our HD technology to our graduate students only. However, we are offering this technology to our undergraduate students as well. We currently have full HD curriculum added to our production classes. For the purposes of editing, USB 2.0 on the 2011 model MacPros in the lab provide too slow of a data rate for HD editing. The USB 3.0 and Thunderbolt 2 ports on the Mac Pros are much more suitable for handling HD footage. For example, many students opt to buy USB 3.0 portable hard drives and unfortunately only get the speed of USB 2.0 on the outdated iMacs. The newer Mac Pros are also "future-proofed" because they can support the newer 4K displays, along with current Thunderbolt displays. Thus, we need computers that will enable the department to keep up with the demands of technology.

*Note: Requested items are updated to a lesser quantity to reflect a more reasonable budget.

The requested items are as follows:
For the 3 New MacPros : Total: $23,247
(x 3) Apple 8- Core Mac Pro 3GHz, 512GB Storage, 32GB RAM ($5500):$ 16,500
(x 3) 27-inch Apple LED Thunderbolt Display ($949) : $2,847
(x6) 2TB Samsung Solid Slate Internal Drive ($650) : $3,900

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
The Department of Television and Radio strives to prepare students for the job market. We want to simulate real-world job experience. Our curriculum includes multi-cam and post-production classes. Including Mac Pros in the curriculum would allow students to take advantage of current HD and 4K technology, which are essential tools in the field.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:
50 hours
b. Who will supervise the facility and how will that be funded ongoing:
Full staff at our current department will oversee the equipment.
c. What physical space will be used to host the facility, and who has authorized its use:
We have a Multimedia Lab in room 307, Whitehead Hall, and it is the department who that is in charge of authorizing its usage.
d. If any renovations or furnishings will be required to support the project, how will they be funded?
No renovations or furnishings are required.

Please describe how many students will be served each term through the funding of this project, and through what means:
Most of our students at the graduate and undergraduate level, or roughly 500 students TV/Radio students will use this equipment throughout the year, in addition to students from the English Department who use the lab for some of their classes. This includes some of our future photojournalists in the broadcast journalism program. Moreover, we have a great working relationship with the journalism department and sometimes we share our resources. Thus, we hope to continue to extend our relationship by sharing various tools such as the iMac and Mac Pro computers with the Journalism Department.

How will projected outcomes be assessed?
The objective is to meet the demands of our graduate and undergraduate programs. Our program in the Department of TV and Radio has already implemented HD into our entire curriculum. With the upcoming transition from HD to 4K video, the outcomes would be immensely beneficial to students. The new Mac Pros can easily handle 4K files in addition to a variety of video formats. By upgrading technology, the curriculum of our faculty members would not be limited and they will have the teaching power to deal with 4K video which will become the industry standard.
Student Technology Fee Proposal #2016-78

Studio Pedestal Proposal

School: School of Visual, Media and Performing Arts
Department/Office: Television Center
Applicant Name: Corbet, Jeanine

Description of Proposed Project:
To fund the purchase of a professional studio pedestal (Vinten Ospey Elite) necessary for TV/Radio Department Multi-Camera production classes. These classes are required for both TVR undergraduates and MFAs in Television production.

This Pedestal will replace one of our current models which is broken and cannot be repaired; it is over 20 years old. Studio pedestals allow camera operators to create the smooth movement required for broadcast productions.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
This type of professional camera support is what keeps our students able to train in a studio environment that is on par with professional television studio production.

This is a major component of our production studio and supports one of our new HD studio cameras. This access to professional grade equipment improves students’ experience, is a big draw for potential students and has kept Brooklyn College Television among the top programs in the country.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
The TV Center supports both undergraduate and graduate Television & Radio Department production classes which are required for all Majors. There are currently approx. 400 undergrad majors and 25 - 40 MFA students.

How will projected outcomes be assessed?
We can easily track equipment usage through our booking system. More cameras will allow more student requests to be processed. Both students and Instructors will benefit from the upgrade and increase in inventory.
Sold To:
Brooklyn College
2900 Bedford Ave
1146 Boylan Hall
Attn: Fluqueen Fredricks
BROOKLYN, NY 11210

Bill Phone: (718)951-5000

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<td>VINTEN OSPREY ELITE 2 STG STUDIO PEDESTAL BLK/REG <em>This Is A Special Order Item, And Is Not Returnable.</em></td>
<td>VI35743C (B6743C)</td>
<td>18,299.00</td>
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**PLEASE NOTE:**

***************UPCOMING SCHEDULE CHANGE ***************

The B&H SuperStore will be open on Thanksgiving Day,
Thursday November 26th from 10:00AM to 6:00PM
Certain items may be enforced by vendor to sell at the vendor-imposed price posted at the time of order.

**Payment Type:**

NO PAYMENT TYPE SELECTED

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Description of Proposed Project:
The Conservatory of Music has been slowly building our music technology infrastructure and course offerings during recent years, and now we are poised and ready for a big leap forward. In fall 2016 we will debut two new MFA degrees in Music composing that are technology-focused: One MFA in Media Scoring (soundtracks, etc.) and the other in Sonic Arts (electronic composition, sound design, multimedia). These two 60-credit degrees were designed to train future leaders in these fields. As such, we feel that now is the moment for us to upgrade our technology infrastructure to put our facilities on a truly professional level, to best serve both those new programs and our current undergraduate and graduate students. We want our students to have access to truly professional experiences at Brooklyn College, to prepare them for careers in music and media.

Moreover, the Conservatory is arranging articulation agreements with LaGuardia Community College and BMCC to facilitate students from their programs proceeding to Brooklyn College to finish bachelor's degrees in Music. With this and the new music technology initiative at Murrow High School, we are in initial stages of planning a Music Technology degree at the undergraduate level.

Our budget outlines the upgrade plan for four of our most-used spaces.

? We request that four rooms be upgraded to smart classrooms. We have spoken with Mr. Anil Lily about this, and he has toured the rooms and offered advice on how to best proceed if approved.

The following requests are organized by room. Of course we feel that all upgrades are necessary and would be valuable to our students. However we have ordered them in terms of need/priority in case full funding is not available.

? We request that room 118 Roosevelt Extension, our advanced production lab/classroom, be upgraded with a truly professional audio mixing console (a "once in a decade" purchase), along with pro-quality microphone pre-amplifier and multichannel digital-to-analog conversion. We also request cables and a lecturer's projection camera to support rehearsal, recording, and course instruction. ($27,796)

? We request that our recording studio receive a "once in twenty years" upgrade including a portable isolation booth, professional-quality analog-to-digital conversion, compressors, and microphones, along with numerous required cables and some other small accessories. The isolation booth and microphones in particular should serve this school for decades to come. ($51,898.10)

? We request that room 116 Roosevelt Extension, our most-used classroom as well as a public ITS lab (approximately 30 open hours per week) receive a "once in a decade" purchase of a new audio mixing console, as well as some new audio interfaces, headphones, and microphones. ($3,983)

? We request funds for two student "recording field packs." Each of these would be a small set of recording equipment and a pelican case. We would allow students to reserve these and borrow them to do recordings around campus or off campus, in a manner similar to how Film and TV/Radio students may borrow equipment to shoot video. ($1,546 total for two field packs.)

? We request an upgrade to 400D Roosevelt Extension, our computer lab that also functions as the class piano studio. Our intention is to expand the number of keyboards in the lab to allow more students per section of each keyboard class, so that we can save money in the long run by offering fewer sections per semester. This request includes additional keyboards, their support materials, headphones, and additional audio hardware to allow for the
instructor to monitor students via headphones as they play. ($16,726.33)

We will upload a detailed budget with this request. We would be happy to communicate about any items requested in case their function or necessity is not clear.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The objectives of this project are to serve hundreds of students per semester. Some of these will take the 38 graduate courses that are part of the new MFAs in Sonic Arts and Media Scoring. Others will be those enrolled in the seven courses of our Music Technology minor at the undergraduate level. Others will be performers in our ensembles, as well as others who attend concerts and hear recordings.

Our goal is to have first-rate experiences for our students, to best prepare them for careers in music and media technologies.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
   30

b. Who will supervise the facility and how will that be funded ongoing:
   116 Roosevelt Extension is our public lab. It is overseen and managed by Geers, Cohen, and Brunner. The Conservatory of Music funds the lab staffing, using a combination of a graduate assistant, a college assistant, and work-study students.

c. What physical space will be used to host the facility, and who has authorized its use:
   The rooms that will be improved are 118RE, 312RE, 132R, 116RE, and 400D RE. The Conservatory of Music has authority to use these spaces.

d. If any renovations or furnishings will be required to support the project, how will they be funded?
   If any additional renovations are required as part of this project, the Conservatory of Music will cover those expenses.

Please describe how many students will be served each term through the funding of this project, and through what means:

Students served by this funding will include any of the 60-70 MFA students once we have full enrollment, the 30 Music composition majors, the nearly 250 Music majors, as well as those with other majors who enroll in music ensembles and music courses.

As mentioned above, we now have a total of 45 graduate and undergraduate courses that we offer. These serve a large number of students. For example, our MUSC 1300 "Core" music course enrolls hundreds of students each semester. MUSC 3260, Introduction to Music Technology enrolls 15-20 per semester; MUSC 3261, Electroacoustic Music 1, 15-20 per semester; MUSC 3262, Electroacoustic Music 2, 15-20 per semester; MUSC 3263, Building Electronic Music Instruments, 20+ per semester; MUSC 3322, Audio Recording Techniques(15-20 per semester); MUSC 7374, Computer-Assisted Composition, 10-20 students per semester; and the Electroacoustic Ensemble (5-10 per semester).

In short, we feel that the investment in these tools will serve a large body of Brooklyn College students, and help them have professional-level experiences that will be extremely valuable to them when they graduate and launch their careers.

How will projected outcomes be assessed?

Student outcomes will be assessed as these tools are used in our courses. We will instruct students, test their understanding by means of quizzes and projects, and will solicit feedback regarding the success of our implementation of the equipment.
Music STF grant application budget, fall 2015

1. Smart classroom upgrades
We request that the following rooms be upgraded to smart classrooms, with configurations optimized for Music technology courses and presentations.

1. 118 Roosevelt Extension
2. 116 Roosevelt Extension
3. 312 Roosevelt Extension (only projector needed)
4. 400-D Roosevelt Extension

Each room has particular needs, which we have discussed with Mr. Anil Lily. If approved, we would be happy to work with ITS staff to optimize implementation.

2. 118 Roosevelt Extension

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<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>SSL 24 channel Matrix 2 hybrid digital/analog mixing console with integrated</td>
<td>$17,776</td>
<td><a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Room 118 RE quote-EST116804.pdf”)</td>
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<tr>
<td>NOTE: This is a “once every ten years” purchase that will serve our programs for a decade or more.</td>
<td></td>
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<tr>
<td>Millennia HV-3C dedicated microphone pre-amplifier.</td>
<td>$1,811</td>
<td><a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Room 118 RE quote-EST116804.pdf”)</td>
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<tr>
<td>NOTE: This is a “once every ten years” purchase that will serve our programs for a decade or more.</td>
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<tr>
<td>Modular ADC: Burl Audio B80 Mothership Digilink B80 Mothership Chassis with BP250 (BMB-BMB1)</td>
<td>$1,999</td>
<td><a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Room 118 RE quote-EST116804.pdf”)</td>
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<td>NOTE: This is a “once every ten years” purchase that will serve our programs for a decade or more.</td>
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<tr>
<td>Modular ADC: Burl Audio BAD4 4 Channel ADC card for B80 Mothership (B80-BAD4)</td>
<td>$2,998</td>
<td><a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Room 118 RE quote-EST116804.pdf”)</td>
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<td>NOTE: This is a “once every ten years” purchase that will serve our programs for a decade or more.</td>
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<td>Modular ADC: Burl Audio BDA8 8 channel DAC card for B80 (B80-BDA8)</td>
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<td>NOTE: This is a “once every ten years” purchase that will serve our programs for a decade or more.</td>
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<tr>
<td>Patch cables for our analog modular synthesizers.</td>
<td>$112.00</td>
<td><a href="http://www.sweetwater.com/store/detail/ModPatch18pk">http://www.sweetwater.com/store/detail/ModPatch18pk</a></td>
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<tr>
<td>1 TRS male to TRS male Mogami Gold 8 snake (25 FT)</td>
<td>$227</td>
<td><a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Room 118 RE quote-EST116804.pdf”)</td>
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</table>
1 TRS male to Female XLR Mogami Gold 8 Snake (25 FT) • $215 at http://www.daleproaudio.com (please see quote document “Room 118 RE quote-EST116804.pdf”)

1 TRS male to XLR male Mogami Gold 8 Snake (25 FT) • $215 at http://www.daleproaudio.com (please see quote document “Room 118 RE quote-EST116804.pdf”)

Four microphone boom stands
K&M 252 Microphone stands $308 ($77 each * 4 ) at http://www.daleproaudio.com (please see quote document “Room 118 RE quote-EST116804.pdf”)

6 Canare XLR microphone cables (25 FT, EC025F-ORN) • $267 (44.50 each * 6) at http://www.daleproaudio.com (please see quote document “Room 118 RE quote-EST116804.pdf”)

Gooseneck video camera for projecting circuits or mixer details from instructor’s location to projection screen for students to see.

118RE total: $27,796

3. 132 Roosevelt

5x7-foot portable isolation booth for recording.
NOTE: This is a “once every twenty years” purchase that will serve our programs for decades to come.
$16,633 (See attached quote from Whisper Room, Inc.)

Modular ADC: Burl Audio B80 Mothership Digilink B80 Mothership Chassis with BP250 (BMB-BMB1) NOTE: This is a “once every ten years” purchase that will serve our programs for a decade or more.
• $1,999 at http://www.daleproaudio.com (please see quote document “Rec Studio quote-EST116807.pdf”)

Modular ADC: Burl Audio BAD4 4 Channel ADC card for B80 Mothership (B80-BAD4) NOTE: This is a “once every ten years” purchase that will serve our programs for a decade or more.
• $2,998 (Two @ $1,499 each) at http://www.daleproaudio.com (please see quote document “Rec Studio quote-EST116807.pdf”)

Modular ADC: Burl Audio BDA8 8 channel DAC card for B80 (B80-BDA8) NOTE: This is a “once every ten years” purchase that will serve our programs for a decade or more.
• $1,799 at http://www.daleproaudio.com (please see quote document “Rec Studio quote-EST116807.pdf”)

Manley MSLCHP stereo variable MU limiter/compressor (MSLCHP)
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<tr>
<td>Matched pair of 2 Neumann U 87 condenser microphones (008505)</td>
<td>$7,480 (Two @ $3,740 each) at <a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
<td><strong>NOTE:</strong> This is a “once every twenty years” purchase that will serve our programs for a decade or more.</td>
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<tr>
<td>Two Royer R-121-MP matched pair R-121'S - large ribbon element (R-121-MP)</td>
<td>$11,798 (Two pair @ $5,899 per pair) at <a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
<td><strong>NOTE:</strong> This is a “once every twenty years” purchase that will serve our programs for a decade or more.</td>
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<td>Sennheiser Drumkit 600 microphone set (504296)</td>
<td>$4,654 (Two pair @ $2,327 each) at <a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
<td><strong>NOTE:</strong> This is a “once every twenty years” purchase that will serve our programs for a decade or more.</td>
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<tr>
<td>Sennheiser EW112G3-A SK100 G3 bodypack transmitter (ME2 Omni lavalier) (503169)</td>
<td>$866 at <a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
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<td>Canare EC025FB-GREEN audio cord, 25 feet, with L-4E6S, XLR3M-F – GREEN (EC025FB-GREEN)</td>
<td>$182 (Four @ $45.50 each) at <a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
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<td>Mogami Gold TRS to TRS-30 balanced ¼ patch cable, 30 feet (GOLD TRS-TRS-30)</td>
<td>$49 at <a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
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<tr>
<td>Mogami Gold TRS to TRSXLRF-25 TRS to Female XLR patch cable, 25 feet (GOLD TRSXLRF-25)</td>
<td>$44 at <a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
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</table>
### Recording Studio total: $51,898.10

3. 116 Roosevelt Extension

**Allen and Heath QU-16C 16 digital mixer (16 busses)**

*NOTE: This is a “once every ten years” purchase that will serve our programs for a decade or more.*

**Four small stereo audio interfaces for 116RE.**
- $600 (Four @ $150 each) at [http://www.bhphotovideo.com](http://www.bhphotovideo.com)

**Four SE Electronics SE2200A II Class A multi-pattern condenser microphones (SEE-2200AMKII)**
- $1,268 (Four @ $317 each) at [http://www.daleproaudio.com](http://www.daleproaudio.com)

**Sony MDR-7502 headphones (5 pair)**
- $250 (5 pair at $50 each) at [http://www.musiciansfriend.com](http://www.musiciansfriend.com)

**SE Electronics pop shield pop screen**
- $106 (4 at $26 each) at [http://www.daleproaudio.com](http://www.daleproaudio.com)

**116RE total: $3,983**

4. Student “recording field packs” kits (2 kits)

**Two strong road cases to hold the gear**
- $320 (Two @ $160 each) at [http://www.bhphotovideo.com](http://www.bhphotovideo.com)

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Cost</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whirlwind L10 cable – instrument, leader (L10)</td>
<td>(Ten @ $17 each)</td>
<td>$170</td>
<td><a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
</tr>
<tr>
<td>Hosa HMR-006Y Pro stereo breakout, rean 3.5mm TRS to dual RCA, 6 feet (HMR-006Y)</td>
<td>(Ten @ $7.91 each)</td>
<td>79.10</td>
<td><a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
</tr>
<tr>
<td>Atlas DS7E DSK STD 6 inch 2#BS 8-13 EBY (DS7E)</td>
<td>(Four @ $25 each)</td>
<td>$100</td>
<td><a href="http://www.daleproaudio.com">http://www.daleproaudio.com</a> (please see quote document “Rec Studio quote-EST116807.pdf”)</td>
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<tr>
<td>Recording Studio total: $51,898.10</td>
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<tr>
<td>Item Description</td>
<td>Cost</td>
<td>URL</td>
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<tr>
<td>----------------------------------------------------------------------------------</td>
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<td>----------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Two Small audio interfaces (2-4 inputs)</td>
<td>$350 (Two @ $175 each)</td>
<td><a href="http://www.bhphotovideo.com/c/product/892515-REG/Focusrite_Scarlett_2i4_USB_Audio.html">http://www.bhphotovideo.com/c/product/892515-REG/Focusrite_Scarlett_2i4_USB_Audio.html</a></td>
<td></td>
</tr>
<tr>
<td>Two Shure PG 81 microphones</td>
<td>$250 (Two @ $125 each)</td>
<td><a href="http://www.bhphotovideo.com/c/product/1128578-REG/shure_pga81_lc_pga_81_cardioid_condenser_instrument.html">PG81: http://www.bhphotovideo.com/c/product/1128578-REG/shure_pga81_lc_pga_81_cardioid_condenser_instrument.html</a></td>
<td></td>
</tr>
<tr>
<td>Two Shure SM 57 microphones</td>
<td>$198 (Two @ $99 each)</td>
<td><a href="http://www.bhphotovideo.com/c/product/68459-REG/Shure_SM57_LC_SM57_LC_Microphone.html">http://www.bhphotovideo.com/c/product/68459-REG/Shure_SM57_LC_SM57_LC_Microphone.html</a></td>
<td></td>
</tr>
<tr>
<td>Two microphone pop filters with mic stand mounting clip:</td>
<td>$28 (Two @ $19 each)</td>
<td><a href="http://www.bhphotovideo.com/c/product/890200-REG/auray_pfn_6_pfns_nylon_round_pop.html">http://www.bhphotovideo.com/c/product/890200-REG/auray_pfn_6_pfns_nylon_round_pop.html</a></td>
<td></td>
</tr>
<tr>
<td>Four 20-foot XLR cables: (Monster cable, 20ft.)</td>
<td>$140 (Four @ $35 each)</td>
<td>[<a href="http://www.sweetwater.com/store/detail/ClasM20?adpos=1o1&amp;creative=54989267161&amp;devi">http://www.sweetwater.com/store/detail/ClasM20?adpos=1o1&amp;creative=54989267161&amp;devi</a> ce=c&amp;matchtype=&amp;network=g&amp;gclid=CLTk27_VzckCFcMRHwodc3YAww](<a href="http://www.sweetwater.com/store/detail/ClasM20?adpos=1o1&amp;creative=54989267161&amp;devi">http://www.sweetwater.com/store/detail/ClasM20?adpos=1o1&amp;creative=54989267161&amp;devi</a> ce=c&amp;matchtype=&amp;network=g&amp;gclid=CLTk27_VzckCFcMRHwodc3YAww)</td>
<td></td>
</tr>
<tr>
<td>Four microphone boom stands:</td>
<td>$240 (Two @ $120 each)</td>
<td><a href="http://www.sweetwater.com/store/detail/MicStdBoomF">http://www.sweetwater.com/store/detail/MicStdBoomF</a></td>
<td></td>
</tr>
<tr>
<td>Two power strips:</td>
<td>$20 (Two @ $10 each)</td>
<td><a href="http://www.amazon.com/AmazonBasics-6-Outlet-Surge-Protector-Power/dp/B00TP1C51M/ref=sr_1_4?ie=UTF8&amp;qid=1449626235&amp;sr=8-4&amp;keywords=surge+protector">http://www.amazon.com/AmazonBasics-6-Outlet-Surge-Protector-Power/dp/B00TP1C51M/ref=sr_1_4?ie=UTF8&amp;qid=1449626235&amp;sr=8-4&amp;keywords=surge+protector</a></td>
<td></td>
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<tr>
<td><strong>Student kits total:</strong> $1,546</td>
<td></td>
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</tbody>
</table>

**5. 400D Roosevelt Extension**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korg GEC3EXP Digital Group Education Controller (lab controller) (GEC3EXP)</td>
<td>$2,699.99</td>
<td><a href="http://www.soundtree.com">http://www.soundtree.com</a> (please see quote document “Room 400D-RE_quote-SoundTree.pdf”)</td>
</tr>
<tr>
<td><strong>NOTE:</strong> This is a “once every ten years” purchase that will serve our programs for a decade or more.</td>
<td></td>
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</tr>
<tr>
<td>Korg Student Interface Box SCI3v3 with custom mini XLR headset jacks (SCI3V3)</td>
<td>$1539.93 (Seven @ $219 each)</td>
<td><a href="http://www.soundtree.com">http://www.soundtree.com</a> (please see quote document “Room 400D-RE_quote-SoundTree.pdf”)</td>
</tr>
<tr>
<td><strong>NOTE:</strong> This is a “once every ten years” purchase that will serve our programs for a decade or more.</td>
<td></td>
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<tr>
<td>Koss SB40 Headset with TA4FL Connector (SB40GEC)</td>
<td></td>
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<tr>
<td><strong>NOTE:</strong> This is a “once every ten years” purchase that will serve our programs for a decade</td>
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</tbody>
</table>
or more.

<table>
<thead>
<tr>
<th>Description</th>
<th>Price</th>
<th>Link</th>
<th>Quote Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cables To Go 50ft Shielded Cat5E Molded Patch Cable Gray (27270)</td>
<td>$189.95</td>
<td><img src="http://www.soundtree.com" alt="http://www.soundtree.com" /></td>
<td>Room 400D-RE_quote-SoundTree.pdf</td>
</tr>
<tr>
<td>M-Audio Ultra-compact 1in/1out MIDI interface with built-in USB &amp; MIDI (9900-53075-00)</td>
<td>$1,901.22</td>
<td><img src="http://www.soundtree.com" alt="http://www.soundtree.com" /></td>
<td>Room 400D-RE_quote-SoundTree.pdf</td>
</tr>
<tr>
<td>Belkin 8-Outlets Surge Suppressor (K62119)</td>
<td>$75.90</td>
<td><img src="http://www.soundtree.com" alt="http://www.soundtree.com" /></td>
<td>Room 400D-RE_quote-SoundTree.pdf</td>
</tr>
<tr>
<td>Omnirax MCP3 keyboard &quot;surround&quot; (MCP3)</td>
<td>$3,276</td>
<td><img src="http://www.soundtree.com" alt="http://www.soundtree.com" /></td>
<td>Room 400D-RE_quote-SoundTree.pdf</td>
</tr>
<tr>
<td>ON-STAGE KT7800 Deluxe X-Style Bench (KT7800+)</td>
<td>$179.80</td>
<td><img src="http://www.soundtree.com" alt="http://www.soundtree.com" /></td>
<td>Room 400D-RE_quote-SoundTree.pdf</td>
</tr>
<tr>
<td>Horizon 10' MIDI Cable (MIDI5-10)</td>
<td>$87.60</td>
<td><img src="http://www.soundtree.com" alt="http://www.soundtree.com" /></td>
<td>Room 400D-RE_quote-SoundTree.pdf</td>
</tr>
<tr>
<td>Horizon 6’ DUAL RCA to 1/8&quot; stereo male (255045)</td>
<td>$39.60</td>
<td><img src="http://www.soundtree.com" alt="http://www.soundtree.com" /></td>
<td>Room 400D-RE_quote-SoundTree.pdf</td>
</tr>
<tr>
<td>Doug Mockett WM3A Cable Channel Manager 3’ 6” (WM3A)</td>
<td>$79.80</td>
<td><img src="http://www.soundtree.com" alt="http://www.soundtree.com" /></td>
<td>Room 400D-RE_quote-SoundTree.pdf</td>
</tr>
<tr>
<td>SoundTree Complete Professional Installation (STINSTALLBROOKLYN)</td>
<td>$2,199</td>
<td><img src="http://www.soundtree.com" alt="http://www.soundtree.com" /></td>
<td>Room 400D-RE_quote-SoundTree.pdf</td>
</tr>
</tbody>
</table>
Room 400D-RE total: $16,726.33

Total amount requested: $101,949.43
Music software request

Description of Proposed Project:
We propose to add four music production software packages to the applications currently offered to our students. These will be used widely in our courses, as detailed in the "direct impact" question below.

We seek additional software now because in fall 2016 we will debut two new MFA programs in music composition, with a focus on music technology: Media Scoring and Sonic Arts. Both of these programs will relate to the MFA Film programs at the Feirstein Graduate School of Cinema.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The Conservatory of Music has been slowly building our music technology infrastructure and course offerings during recent years, and now we are poised and ready for a big leap forward. In fall 2016 we will debut two new MFA degrees in Music composing that are technology-focused: One MFA in Media Scoring (soundtracks, etc.) and the other in Sonic Arts (electronic composition, sound design, multimedia). These two 60-credit degrees were designed to train future leaders in these fields. As such, we feel that now is the moment for us to upgrade our technology infrastructure to put our facilities on a truly professional level, to best serve both those new programs and our current undergraduate and graduate students. We want our students to have access to truly professional experiences at Brooklyn College, to prepare them for careers in music and media.

This request seeks to expand the music production and composition software we offer to our students in our courses and facilities, as well as some necessary related items (dongles and two hard drives).

Software will be installed via networked licenses in rooms 116 Roosevelt Extension, 118 Roosevelt Extension, 400D Roosevelt Extension, 132 Roosevelt, and rooms TBA in the Feirstein facility and Tow Performing Arts Center. This wide dispersal will maximize use of the applications.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

30

b. Who will supervise the facility and how will that be funded ongoing:

116 Roosevelt Extension is our public lab. It is overseen and managed by Geers, Cohen, and Brunner. The Conservatory of Music funds the lab staffing, using a combination of a graduate assistant, a college assistant, and work-study students.

c. What physical space will be used to host the facility, and who has authorized its use:

Software will be installed via networked licenses in rooms 116RE, 118RE, 400D RE, 132 Roosevelt, and rooms TBA in the Feirstein facility and Tow Performing Arts Center.

d. If any renovations or furnishings will be required to support the project, how will they be funded?

The Conservatory of Music will cover costs of any needed renovations, which we anticipate will be zero or low.
Please describe how many students will be served each term through the funding of this project, and through what means:

We estimate about 150-160 students will use this software each semester. Although it will vary a bit from semester to semester, we anticipate about 60-80 students each semester using Logic, Komplete, and Waves; probably about 60 per semester using the Vienna Symphonic Library; and about 20 per semester using the GRM Tools.

The Vienna Symphonic Library will be used in the following courses:

Logic Pro X will be used in the following courses:

Native Instruments Komplete will be used in the following courses:

The Waves Gold bundle will be used in the following courses:

GRM Tools Complete I will be used in the following courses:

How will projected outcomes be assessed?
Student outcomes will be assessed as these programs are used in our courses. We will instruct students, test their understanding by means of quizzes and projects, and will solicit feedback regarding the success of our implementation of the equipment.
Software Request Form (revised 10/2015)

1. Department/Office Name: Conservatory of Music

2. Applicant Name(s): Douglas Geers, Douglas Cohen, George Brunner

3. Primary Contact for Request(s): Douglas Geers, dgeers@brooklyn.cuny.edu

4. Has this proposal been approved by the appropriate Dean, Chair or Area Head? Approval pending (Stephanie Jensen-Moulton, Chair of Music; Maria Conelli, Dean of Arts)

5. Description of proposed expenditure/project:

   The Conservatory of Music has been slowly building our music technology infrastructure and course offerings during recent years, and now we are poised and ready for a big leap forward. In fall 2016 we will debut two new MFA degrees in Music composing that are technology-focused: One MFA in Media Scoring (soundtracks, etc.) and the other in Sonic Arts (electronic composition, sound design, multimedia). These two 60-credit degrees were designed to train future leaders in these fields. As such, we feel that now is the moment for us to upgrade our technology infrastructure to put our facilities on a truly professional level, to best serve both those new programs and our current undergraduate and graduate students. We want our students to have access to truly professional experiences at Brooklyn College, to prepare them for careers in music and media.

   This request seeks to expand the music production and composition software we offer to our students in our courses and facilities, as well as some necessary related items (dongles and two hard drives).

   The software requested is:

   1. Two copies of the Vienna Symphonic Library sample library, the professional standard for sound fonts in the field of Media scoring. This is essential for us to own by the time we launch our MFA in Media Scoring in Fall 2016. To run the library, we will need dongles and a 1TB hard drive for each copy. We request two copies.

   2. Logic Pro X music production software. Along with Pro Tools, this is one of the most popular recording/composition applications in the industry. We currently have zero copies of it. We request a license for 20 seats.

   3. Native Instruments Komplete software bundle. This collection of 39 programs for generating and manipulating sounds has become widely-used among both commercial and experimental music producers. We request a license for 20 seats.

   4. The Waves Gold bundle of audio plug-ins. These are fabulous professional sound production tools used worldwide in the recording industry. We request 10 seats.

   5. GRM Tools Complete I. This collection of audio processing plug-ins has a stellar reputation in the electroacoustic music field. We request two copies.
6. **Estimated total cost:** $16,492  
   The detailed budget is as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Cost</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Instruments Komplete software bundle –20 networked authorizations</td>
<td>2</td>
<td>$225 * 20 = $4,500</td>
<td><a href="http://www.sweetwater.com/store/detail/Komp10UltLabAd">http://www.sweetwater.com/store/detail/Komp10UltLabAd</a></td>
</tr>
<tr>
<td>Two copies of Vienna Orchestra sample library (one Feirstein, one main campus)</td>
<td>2</td>
<td>$180 * 2 = $3,780</td>
<td><a href="http://www.sweetwater.com/store/detail/ViennaSoftPkg">http://www.sweetwater.com/store/detail/ViennaSoftPkg</a></td>
</tr>
<tr>
<td>Four “Vienna Key” software keys, required to run Vienna library</td>
<td>8</td>
<td>$24 * 8 = $192</td>
<td><a href="http://www.sweetwater.com/store/detail/VSLKey/">http://www.sweetwater.com/store/detail/VSLKey/</a></td>
</tr>
<tr>
<td>Two 1TB hard drives to house Vienna library</td>
<td>2</td>
<td>$180 * 2 = $360</td>
<td><a href="http://www.sweetwater.com/store/detail/StuMini1TB?adpos=1o1&amp;creative=55226102161">http://www.sweetwater.com/store/detail/StuMini1TB?adpos=1o1&amp;creative=55226102161</a> &amp;device=c&amp;matchtype=&amp;network=g&amp;gclid=COLK9OjazckCFQ0XHwodrH4FLw</td>
</tr>
<tr>
<td>Waves Gold bundle plug-ins. Lab pack of ten installations</td>
<td>10</td>
<td>$300 * 10 = $3,000</td>
<td><a href="http://www.waves.com/bundles/gold?gclid=CJKn8YnZzckCFY1cHwodMjJlcw">http://www.waves.com/bundles/gold?gclid=CJKn8YnZzckCFY1cHwodMjJlcw</a></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>$16,492</td>
<td></td>
</tr>
</tbody>
</table>

7. **Would you like to:** Retire software? Introduce new software? Upgrade existing software?  
   Retire ______ Introduce __X__ Upgrade ______

8. Will faculty need training on the new software?  
   **No faculty training will be required.**

9. Will software be used for specific courses? Which courses?  
   **The Vienna Symphonic Library** will be used in the following courses:  

   **Logic Pro X** will be used in the following courses:  
Composition III, Sonic Arts Composition IV, Sequencing/Sampling, Sound Design I, Sound Design II, Scoring Composition Seminar, Private Scoring Lessons I, Private Scoring Lessons II, Media Scoring Capstone I, Media Scoring Capstone II

**Native Instruments Komplete** will be used in the following courses:

**The Waves Gold bundle** will be used in the following courses:

**GRM Tools Complete I** will be used in the following courses:

10. How many sections will be offered?
The courses will be offered in rotation, with generally 8—10 courses happening per semester, one section of each per semester.

11. How many students will be using the software each term?
Although it will vary a bit from semester to semester, we anticipate about 60-80 students each semester using Logic, Komplete, and Waves; probably about 60 per semester using the Vienna Symphonic Library; and about 20 per semester using the GRM Tools.

12. Does the college have a similar software tool already? Why is this new tool needed?
We currently own many copies of Pro Tools, the industry standard in audio recording software. However Logic has capabilities and strengths that differ from Pro Tools, and we want to give students exposure to both platforms.

13. How will the new software effectiveness be assessed?
Student outcomes will be assessed as these programs are used in our courses. We will instruct students, test their understanding by means of quizzes and projects, and will solicit feedback regarding the success of our implementation of the equipment.
Description of Proposed Project:
In this year’s proposal, we seek to augment our current inventory of equipment with smaller essentials that will add functionality and versatility to what we have. Requested items in this category are Mini Display Port to VGA and HDMI adapters, HDMI cable, Ethernet cable, and RCA to mini plug audio adapters. We are also seeking to secure two desktop computers that we got last year with locking cables. Also included are three Wi-Fi routers for our spaces which will not be connected to the internet but rather are dedicated to use in creating communication networks for our computers and mobile devices.

Video: We also seek to add to our high demand video camera inventory by adding four basic workhorse Panasonic camcorders.

Audio: We are seeking to add a basic 48 key USB keyboard controller and two portable digital audio recorders.

Projectors: We are also seeking to augment our highly in demand projector stock with two short throw projectors, two HD projectors (for projection mapping), two pico projectors, and one high power projector. Along with the projectors, we are seeking to acquire much needed portable projection screens in floor standing and tabletop forms.

Lighting: We are seeking to get a DMX USB interface which will allow computer control of DMX lighting systems such as the LED lights that we got last year.

Software: We are seeking to add projection mapping capability with a new software title called MadMapper and we seek to upgrade our most heavily used software Max/MAS to the current version 7. Separate software request form attached.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The result of successful acquisition of this equipment will have a direct twofold impact on student learning. The primary impact will be to provide students with experience using a greater variety of technology in fulfilling class assignments. The secondary impact will be to expand the capabilities of our existing equipment making the most use of the equipment that we have.

The objectives of this STF request are to:
1) Upgrade and expand components of the PIMA M.F.A.’s performance equipment. The PIMA M.F.A. produces more off-campus events than any other program, department, or entity at the college, and the demand for projectors, multi-projection capability, video capture and recording, and audio recording is ever growing.
2) Provide additional technologies to expand student work and professional preparation, such as allowing for multi-projection setups and providing high quality video and recording in a variety of different situations.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:
   n/a

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:
d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
The average of 32 students in the PIMA M.F.A., plus students from outside the program taking PIMA courses; perhaps an additional 10 per semester; a total of 50 students +/- per year.

How will projected outcomes be assessed?
PIMA has a detailed outcomes assessment framework (it was the first program with fully-implemented OA at the College), and specific requirements of student work are clearly articulated course-by-course. Students in the PIMA courses present their performance works primarily in off-campus venues, including such well known venues as The Brooklyn Museum, St. Mark's Church, Galapagos, the Clemente Soto Velez Cultural Center, and the Bushwick Starr, as well as many lesser-known venues throughout New York City. In the first semester course PIMA 7010 Performances are presented in the New Workshop Theater in Whitman Hall in December.

Students' learning is evaluated through these presentations: In addition to the artistic merit of their productions, they are assessed in the areas of:

? Technical and logistical planning for technology-rich performances, including equipment "pick lists," technical diagrams, division of personnel responsibilities, and research into the capabilities and limitations of each venue.

? Safe and careful transportation, setup, use, and breakdown of equipment, from the storeroom/lab, through system setup and testing, packing, transport, load-in, set-up, on-site testing and rehearsal, performance, strike, load-out, and return transport, and storage/re-setting of labs.

? Development of technological contingency plans to allow for failure of system components, unexpected conditions in a venue, and inevitable uncertainties caused by field technical setups.

? Abilities developed through practical production work to "think on their feet" with regard to quick changes in software and/or hardware configurations necessitated by last minute changes and/or unexpected situations in the field.
Student Technology Fee Proposal Form (revised 10/2013)

Request may not exceed 3 single spaced pages of 11 point type. Longer requests or smaller point type will not be considered.

Please read the accompanying guidelines and instructions carefully before making your proposal. Submit the completed form electronically to STFREQUEST@brooklyn.cuny.edu
Contact Anil Lilly of ITS with any questions – x5861
Deadline: November 27, 2013. Late submissions will not be considered.

1. Department/Office Name: PIMA M.F.A., School of Visual, Media, and Performing Arts

2. Applicant Name(s): Helen Richardson

3. Primary Contact for Request(s): Helen Richardson (HelenR@brooklyn.cuny.edu)

4. Request ____1____ of ____1____

5. Area head approval: ______________Helen Richardson______________

NOTE NEW PROCEDURE! All proposals MUST be approved and submitted by the appropriate executive area head:
Student proposals by VP of Student Affairs Morales. Faculty proposals by the appropriate Dean of School.
Administrative proposals by AVP Mark Gold. Library proposals by the Chief Librarian Stephanie Walker

6. Description of proposed expenditure/project:

In this years proposal we seek to augment our current inventory of equipment with smaller essentials that will add functionality and versatility to what we have. Requested items in this category are Mini Display port to VGA and HDMI adapters, HDMI cable, Ethernet cable and RCA to mini plug audio adapters. We are also seeking to secure two desktop computers that we got last year with locking cables. Also included are three Wi-Fi routers for our spaces which will not be connected to the internet but rather are dedicated to use in creating communication networks for our computers and mobile devices.

Video: We also seek to add to our high demand video camera inventory by adding four basic workhorse Panasonic camcorders.
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Lighting: We are seeking to get a DMX USB interface which will allow computer control of DMX lighting systems such as the LED lights that we got last year.

Software: We are seeking to add projection mapping capability with a new software title called MadMapper and we seek to upgrade our most heavily used software Max/MAS to the current version 7. Separate software request form attached.

7. Estimated total cost: (ITS can assist with general technology cost estimates):
   Total $10,718.88

Are any of the items in your proposal available from only one source? If so, please attach a sole source attestation letter from the vendor(s) and also one from your department/office, as required by Purchasing.
8. How many students will be served each term through the funding of this project? The average of 32 students in the PIMA M.F.A., plus students from outside the program taking PIMA courses; perhaps an additional 10 per semester; a total of 50 students +/- per year.

9. If funding is requested for a lab, other public access technology facility, or other physical facility: n/a
   a. How many hours per week the lab will be open?
   b. Who will supervise the facility and how will that be funded ongoing? (STF will not fund staffing)
   c. What space will be used to host the facility and who has authorized its use?
   d. Will any renovations or furnishings be required to support the technology requested? If so, how will these be funded? (STF will not fund renovations or most furnishings)

10. What are the objectives of this project? How will student outcomes be assessed?
    **Objectives:**
    The objectives of this STF request are to:
    Upgrade and expand components of the PIMA M.F.A.’s performance equipment. The PIMA M.F.A. produces more off-campus events than any other program, department, or entity at the college, and the demand for projectors, multi-projection capability, video capture and recording, and audio recording is ever growing.
    2) Provide additional technologies to expand student work and professional preparation, such as allowing for multi projection setups, and providing high quality video and recording in a variety of different situations.

    **Outcomes:**
    PIMA has a detailed outcomes assessment framework (it was the first program with fully-implemented OA at the College), and specific requirements of student work are clearly articulated course-by-course.
    Students in the PIMA courses present their performance works primarily in off-campus venues, including such well known venues as The Brooklyn Museum, St. Mark’s Church, Galapagos, the Clemente Soto Velez Cultural Center, and the Bushwick Starr, as well as many lesser-known venues throughout New York City. In the first semester course PIMA 7010 Performances are presented in the New Workshop Theater in Whitman Hall in December.
    Students’ learning is evaluated through these presentations: In addition to the artistic merit of their productions, they are assessed in the areas of:
    • Technical and logistical planning for technology-rich performances, including equipment "pick lists," technical diagrams, division of personnel responsibilities, and research into the capabilities and limitations of each venue.
    • Safe and careful transportation, setup, use, and breakdown of equipment, from the storeroom/lab, through system setup and testing, packing, transport, load-in, set-up, on-site testing and rehearsal, performance, strike, load-out, and return transport, and storage/re-setting of labs.
    • Development of technological contingency plans to allow for failure of system components, unexpected conditions in a venue, and inevitable uncertainties caused by field technical setups.
    • Abilities developed through practical production work to "think on their feet" with regard to quick changes in software and/or hardware configurations necessitated by last minute changes and/or unexpected situations in the field.

11. How will this request have a direct impact on student learning or student life?
    The result of successful acquisition of this equipment will have a direct twofold impact on student learning. The primary impact will be to provide students with experience using a greater variety of technology in fulfilling class assignments. The secondary impact will be to expand the capabilities of our existing equipment making the most use of the equipment that we have.
IMPORTANT GUIDELINES AND INSTRUCTIONS

Examples if acceptable uses of STF funds:
- Acquiring or upgrading student accessible computers
- Implementing or upgrading student-serving computer labs
- Acquiring or developing new tools to improve student services
- Acquiring equipment or software to support faculty development of new or improved courseware
- Acquiring or upgrading instructional software
- Upgrading instructional spaces to support technology-assisted learning
- Computer furniture and network/phone cabling
- Acquiring technology tools to support college-sponsored student activities
- Requests for multiple years of funding will be entertained, but are less likely to be approved.

Examples of unacceptable uses of STF funds:
- Supplies, other than an initial small starter supply for a new piece of equipment
- Construction or other infrastructure needs, such as HVAC, electrical work, painting, window shades etc.
- Salaries or stipends - neither P/T nor F/T - for lab-tech, lab-support, or other implementation or support needs.
- Equipment or software for faculty research or private faculty use
- Requests to utilize STF funds to replace or subsidize standard budgeted expenditures for college operations.

Funding and Procurement:

- Proposals approved for funding still need to go through the standard CUNY procurement process, which can be time consuming and require adherence to many arcane regulations. This requires your cooperation now and during the procurement process in the following year. Approved proposals that cannot be successfully procured by January of the spending year are subject to forfeiture and the funds allocated to other queued proposals.

- The STF committee reviews each proposal in early Spring and assigns one of the following determinations to each: Approved in whole or in part, Declined, Held in queue for possible funding later in the year. The decision will be communicated in writing to each submitter, typically within one month after the STF decisions are made.

- Proposals submitted now will be executed and funded in the next fiscal year. Those funds do not typically start arriving until Fall of that year, and are collected throughout the year (Fall and Spring). While every effort will be made to initiate purchases as quickly as possible, most purchases will not be completed in time for the Fall term, and some may have to be deferred to Spring. Please keep this in mind when planning your Fall 2014 classes.

- CUNY requires that STF funds be expended in the year they are collected. Therefore if ITS or College Purchasing determines that a purchase is not practically attainable in the necessary timeframes, the allocations may be rescinded and the funds reallocated to other queued projects.

- Proposals are approved only for the items requested. Any subsequent cost savings return to the general STF fund for reallocation. Funding allocations are based on the proposal estimate and may not increase to cover any subsequent price increases.
Preparing Your Proposal:

- Almost all activity on campus is somehow ultimately related to students. However, only proposals that provide fairly direct and immediate benefit to students will be considered.

- Proposals previously submitted, but not funded for any reason, do not automatically get considered in subsequent years. A new proposal must be submitted.

- Instructional software requests must be approved by the college’s Software Coordination Committee, which verifies technical compatibility, and ensures that true campus-wide implementation costs are considered. The Software Request Form can be downloaded from: [http://www.brooklyn.cuny.edu/bctf/stfp/](http://www.brooklyn.cuny.edu/bctf/stfp/)

- If a proposal requires a new space on campus, it will not be considered unless the submitter FIRST obtains an appropriate location, approved by the administration for this use.

- STF allocations are based on the proposal's good-faith estimates, which should preferably be based on actual price quotes where possible.

- Proposals should include all related needs in one application. Do not submit multiple applications for smaller amounts of equipment that will serve the same purpose.

- Please be sure to include copies of any quotations, estimates, suggested vendors, and sole vendor letters that may be required to facilitate the procurement, if approved. Quotes must list the same exactly matching items only, with no additional items. All quotes must be tax exempt. NYS and CUNY procurement rules require the following:
  - If your order is under $5,000, three vendor quotes are needed.
  - If your order is over $5,000, five vendor quotes are needed.
  - Please make sure that all quotes include shipping to ITS, Library, 4th Flr, 2900 Bedford Avenue, Brooklyn, NY 11210. Large items or skids must be delivered with lift gate service and inside delivery. Make sure that your vendor quotes include these services in their pricing.
  - If your request includes items that can only be purchased through one vendor, sole source attestation letters from the vendor and your department/office are required. The department/office letter should include the following points on official department letterhead:
    - Provide background information.
    - Identify need for the purchase.
    - Demonstrate why competitive solicitation is not warranted.
    - How did you determine sole source was the best method?
    - Clarify how reasonable price and terms were determined.
    - Justify - why this vendor?
    - What happens if the College doesn't make this purchase (as a sole source)?
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Subtotal: $11,839.98
Sales Tax Total: $11,839.98
Software Request Form (revised 10/2015)

1. Department/Office Name: Performance and Interactive Media Arts [PIMA]

2. Applicant Name(s): Briggan Krauss (college assistant to the PIMA program on behalf of Department Director Helen Richardson)

3. Primary Contact for Request(s): Briggan Krauss

4. Has this proposal been approved by the appropriate Dean, Chair or Area Head? Yes

5. Description of proposed expenditure/project: Purchase software licenses for one new application (five licenses) for video projection mapping; MadMapper and to upgrade our version of Max to the current version Max 7. Each of these are for our five main computers (three Mac Pro laptops, one Mac Pro and one iMac).

6. Estimated total cost: Educational pricing for MadMapper for five licenses is $566 and Max 7 upgrade for five licenses is $555. Total $1121.

7. Would you like to: Retire software? Introduce new software? Upgrade existing software?
   Retire _____ Introduce ____ Upgrade __X__

8. Will faculty need training on the new software? Yes but can be done in house.

9. Will software be used for specific courses? Which courses? Video is used extensively across our department along with Max so these software titles will be welcome, heavily used additions to our whole program.

10. How many sections will be offered?

11. How many students will be using the software each term? These titles are useful to every student in the PIMA program.

12. Does the college have a similar software tool already? If so, why is this
new tool needed? No. MadMapper is a unique application that will fill an existing void in our software kit. Max 7 is the current industry standard for this software which is an important part of our program.

13. How will the new software effectiveness be assessed?
Student Technology Fee Proposal #2016-96

Two computers for the Meier Bernstein Art Library

Description of Proposed Project:
Two iMAC 21.5”/2.8QC/8GB/1TB computers to replace two very old ones (one barely working and one that no longer even turns on) that students used to use in the Art Department’s Meier Bernstein Art Library to access online information to supplement the library’s collections.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The library’s 3,000 volumes cover only a fraction of the information that students need and want about art history and today’s art world. In the field of art there are large databases of images—available from museums, academic institutions, and commercial companies—that students can consult for specific assignments, research, general learning, and pleasure. Our library supplements the main college library as a place where our majors get to know each other and can study and explore their art interests together, as well as providing someplace where they can feel they belong—so important in a commuter college. Virtually every library today offers online access and we should not be an exception.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
36

b. Who will supervise the facility and how will that be funded ongoing:
Stephen Margolies and Elizabeth Vittorioso are the two supervisors; both are on staff and receive regular salaries. In addition there are five to eight Federal Work-Study student monitors who are paid by the Federal government. Therefore, no funding is required.

c. What physical space will be used to host the facility, and who has authorized its use:
5300, 5304, and 5304A Boylan Hall. These rooms belong exclusively to the Art Department.

d. If any renovations or furnishings will be required to support the project, how will they be funded?
The rooms are already fully furnished. Nothing is required.

Please describe how many students will be served each term through the funding of this project, and through what means:
The library is used by art students, art history students, and students from other disciplines taking art courses. We never kept a formal count, but at any given time there seems to be between three and eight users present, which amounts to more than a dozen a day, most of whom used the old computers when they were in working order. Multiply this by the four days a week we are open 9 AM-6 PM, 15 weeks a semester, and two semesters a year, and our users total at least 1,500 annually.

How will projected outcomes be assessed?
The library has no formal outcomes assessments. The help these computers provide our students is certainly reflected in the formal outcomes assessments of our academic programs in general, but, by itself, would be
difficult to quantify.
Apple Inc. Education Price Quote

Customer: Stephen Margolies  
BROOKLYN COLLEGE CUNY  
Phone: 00  
email: stephenm@brooklyn.cuny.edu

Apple Inc:  
Kevin Black  
12545 Riata Vista Circle  
MS: 183-IES  
Austin, TX 78727  
Phone: 512-6746823  
Fax: 800-590-0325  
email: kblack@apple.com

Apple Quote: 2202765242  
Quote Date: 4-Dec-2015  
Quote Valid Until: 3-Jan-2016

Quote Comments:  
Please reference Apple Quote number on your Purchase Order.  
New York State Contract # PT65428. Please include this number on your purchase order.

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Edu List Price Total 2,498.00  
eWaste Fee / Recycling Fee 0.00  
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Extended Total Price* 2,498.00  
*In most cases Extended discounted Total price does not include Sales Tax  
*If applicable, eWaste/Recycling Fees are included. Standard shipping is complimentary

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  - If you are the Authorized Purchaser and need to register for access to the Apple Education Online Store, go to http://myaccess.apple.com. For registration assistance, call 1.800.800.2775, option 4, option 1.

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  - For more information, go to provision C below, for details.

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- VALID SIGNATURE OF AN AUTHORIZED PURCHASER
- APPLE PART NUMBER AND/OR DESCRIPTION OF PRODUCT AND QUANTITY
- TOTAL DOLLAR AMOUNT AUTHORIZED OR UNIT PRICE AND EXTENDED PRICE ON ALL LINE ITEMS
- CONTACT INFORMATION: NAME, PHONE NUMBER AND EMAIL

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E. THE AMOUNT OF THE VOLUME PURCHASE PROGRAM (VPP) CREDIT SHOWN ON THIS QUOTE WILL ALWAYS BE AT UNIT LIST PRICE VALUE DURING REDEMPTION ON THE VPP STORE.

F. UNLESS SPECIFIED ABOVE, APPLE'S STANDARD SHIPPING IS INCLUDED IN THE TOTAL PRICE.
Description of Proposed Project:
Funding for this project will upgrade our server switch, two lab printers, and will add computers and displays for student exhibitions hosted by the Art Department. All equipment that is in need of upgrading is well over ten years old, is used by the entire cohort of digital art students, and is in need of replacement.

The networking switch is an important piece of equipment, as all three of our student labs depend on the use of a server for file sharing, user network accounts, and print management. Upgrading our server's switch will help improve our labs networking performance and reliability. Currently we have a HP ProCurve 4000M switch and would like to replace it with two new HP 2920 switches, one with 24 ports and the other with 48 ports, this will cover all equipment that is hosted on our server.

In 5207B we have an older HP 8000 laser printer that is in serious need of replacement, this printer is frequented by both professors and students to print out classroom related documents. Due to the printers age it is very slow, irresponsive, and is nearly unmanageable on our network. This printer would be upgraded to an HP LaserJet Pro MFP M521dn which would fulfill the needs of our students and professors using 5207B.

The second printer we would like to upgrade is a photo printer located in the 5201B Graduate Digital Art Lab. Currently there is an Epson Stylus Photo 1400 that is also in dire need of upgrading. We would like to replace the older Epson printer with an Epson SureColor p400 inkjet printer.

Lastly, each year the Art Department hosts exhibitions that often feature student works of art that are needed to be ran on computers and/or digital displays. Often, the digital art that the graduate students make is difficult or impossible to show in graduate reviews because we lack portable and easily maneuverable equipment. Moving forward we would like request two Mac Minis and two Samsung DM32E LED displays that would run video and animation works created by our graduate and undergraduate students.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
With the new printer in 5207B students taking digital art courses will be able to print graphic compositions and other class related documents without running into long wait times or technical issues. Graduate students will be able to print high quality digital photos with the new Epson photo printer in the Graduate Digital Art Lab. The new network switches will provide faster and more reliable network services for our students throughout the labs. Students will have access to professional displays and Mac minis which they will be able exhibit their work on during our yearly out come assessment shows, graduate reviews, off campus exhibitions, and the MFA thesis exhibition. Objectively, these equipment items are necessary because they provide the services our students need in order to diligently produce work in the Digital Art Labs. The Digital Art Labs are technology focused, and it is vital to move forward with procuring updated equipment that students can use. In addition, the display of the high quality work they produce will increase visibility of the area across the campus and across the city.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
40

b. Who will supervise the facility and how will that be funded ongoing:
Mitchell Patrick (CLT / Lab Director). No additional funding required

c. What physical space will be used to host the facility, and who has authorized its use:
5102B, 5207B, and 5201B.

Mitchell Patrick (CLT / Lab Director) Current professors and students who have access to the labs for classes.

d. If any renovations or furnishings will be required to support the project, how will they be funded?
No renovations or furnishings are required for this project.

Please describe how many students will be served each term through the funding of this project, and through what means:
On average the Digital Art labs serves the following students per Fall and Spring semesters:

- 251 Undergraduate students
- 27 Graduate Art students
- 15 PIMA students

How will projected outcomes be assessed?
Each year the Art Department hosts outcome assessment exhibitions that displays student art works created in the Digital Art Labs. Student work is also on a digital display everyday in the Art Department hallway. MFA students mount a thesis exhibition every year, many of these art works rely upon the Digital Art Labs for their execution and display for the thesis show. Assessments will also be determined by the reliability of the services and equipment the Digital Art Lab provides to its students, who display their works in the aforementioned exhibitions and within their own personal portfolios.
Apple Inc. Education Price Quote

Customer: Mitch Patrick
BROOKLYN COLLEGE CUNY
Phone: 9173753534
e-mail: mpatrick@brooklyn.cuny.edu

Apple Inc:
Kevin Black
12545 Riata Vista Circle
MS: 183-IES
Austin, TX 78727
Phone: 512-6746823
Fax: 800-590-0325
e-mail: kblack@apple.com

Apple Quote: 2202754803
Quote Date: 1-Dec-2015
Quote Valid Until: 31-Dec-2015

Quote Comments:
Please reference Apple Quote number on your Purchase Order.
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New York State Contract # PT65428
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– eWaste Fee / Recycling Fee 0.00

Extended Total Price* 1,718.00

*In most cases Extended discounted Total price does not include Sales Tax
*If applicable, eWaste/Recycling Fees are included. Standard shipping is complimentary

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♦ For more information, go to provision C below, for details.

THIS IS A QUOTE FOR THE SALE OF PRODUCTS OR SERVICES. YOUR USE OF THIS QUOTE IS SUBJECT TO THE FOLLOWING PROVISIONS WHICH CAN CHANGE ON SUBSEQUENT QUOTES:

A. ANY ORDER THAT YOU PLACE IN RESPONSE TO THIS QUOTE WILL BE GOVERNED BY (1) ANY CONTRACT IN EFFECT BETWEEN APPLE INC. (“APPLE”) AND YOU AT THE TIME YOU PLACE THE ORDER OR (2), IF YOU DO NOT HAVE A CONTRACT IN EFFECT WITH APPLE, CONTACT austincontracts@apple.com.

B. ALL SALES ARE FINAL. PLEASE REVIEW RETURN POLICY BELOW IF YOU HAVE ANY QUESTIONS. IF YOU USE YOUR INSTITUTION’S PURCHASE ORDER FORM TO PLACE AN ORDER IN RESPONSE TO THIS QUOTE, APPLE REJECTS ANY TERMS SET OUT ON THE PURCHASE ORDER THAT ARE INCONSISTENT WITH OR IN ADDITION TO THE TERMS OF YOUR AGREEMENT WITH APPLE.
C. YOUR ORDER MUST REFER SPECIFICALLY TO THIS QUOTE AND IS SUBJECT TO APPLE'S ACCEPTANCE. ALL FORMAL PURCHASE ORDERS SUBMITTED BY EMAIL MUST SHOW THE INFORMATION BELOW:

- APPLE INC. AS THE VENDOR
- BILL-TO NAME AND ADDRESS FOR YOUR APPLE ACCOUNT
- PHYSICAL SHIP-TO NAME AND ADDRESS (NO PO BOXES)
- PURCHASE ORDER NUMBER
- VALID SIGNATURE OF AN AUTHORIZED PURCHASER
- APPLE PART NUMBER AND/OR DESCRIPTION OF PRODUCT AND QUANTITY
- TOTAL DOLLAR AMOUNT AUTHORIZED OR UNIT PRICE AND EXTENDED PRICE ON ALL LINE ITEMS
- CONTACT INFORMATION: NAME, PHONE NUMBER AND EMAIL

D. UNLESS THIS QUOTE SPECIFIES OTHERWISE, IT REMAINS IN EFFECT UNTIL 31-Dec-2015 UNLESS APPLE WITHDRAWS IT BEFORE YOU PLACE AN ORDER, BY SENDING NOTICE OF ITS INTENTION TO WITHDRAW THE QUOTE TO YOUR ADDRESS SET OUT IN THE QUOTE.

- APPLE MAY MODIFY OR CANCEL ANY PROVISION OF THIS QUOTE, OR CANCEL ANY ORDER YOU PLACE PURSUANT TO THIS QUOTE, IF IT CONTAINS A TYPOGRAPHIC OR OTHER ERROR.

E. THE AMOUNT OF THE VOLUME PURCHASE PROGRAM (VPP) CREDIT SHOWN ON THIS QUOTE WILL ALWAYS BE AT UNIT LIST PRICE VALUE DURING REDEMPTION ON THE VPP STORE.

F. UNLESS SPECIFIED ABOVE, APPLE'S STANDARD SHIPPING IS INCLUDED IN THE TOTAL PRICE.
Sold To: Julie  
Brooklyn College  
2900 Bedford Ave  
Box 711  
Attn: Accounts Payable  
BROOKLYN, NY 11210

Bill Phone: (718)951-5664  
Work Phone: (718)951-5421 Ext.:A/P  
Fax Phone: (718)951-5423

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<th>Terms</th>
<th>Salesperson</th>
<th>Ship Via</th>
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<td>12/07/15</td>
<td>1305377</td>
<td>N/A</td>
<td>3RB</td>
<td>MULTIPLE</td>
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<th>SKU#</th>
<th>MFR#</th>
<th>Item Price</th>
<th>Amount</th>
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<td>EPSP400</td>
<td>(C11CE85201)</td>
<td>587.02</td>
<td>587.02</td>
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<td>Manufacturer's Rebate $100.00</td>
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<tr>
<td>3</td>
<td>SAMSUNG DM32E 32&quot; LED LCD 19x10 DVI HDMI/REG</td>
<td>SADM32E</td>
<td>(DM32E)</td>
<td>597.99</td>
<td>1,793.97</td>
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<td></td>
<td>This Is A Special Order Item, And Is Not Returnable.</td>
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</tbody>
</table>

PLEASE NOTE:  

**********UPCOMING SCHEDULE CHANGE **********
B&H SuperStore will be closed on Friday December 25th  
We will reopen Sunday December 27th at 10AM

We will be open on New Year's Day  
Friday January 1st from 9AM-1PM  
Certain items may be enforced by vendor to sell at the  
vendor-imposed price posted at the time of order.

Payment Type - NO PAYMENT TYPE SELECTED

Sub-Total: 2,380.99
Shipping: Free STND

Total: 2,380.99
Dear Mitchell Patrick,

Thank you for your recent interest in HP Federal Sales. Award-winning HP products are designed to deliver high-performance technology, powerful networking and legendary HP quality - all at a value that your budget demands. From handheld PCs to Servers, HP provides a single resource for complete solutions that meet all your computing needs. You can rely on HP for the performance, uptime, and efficiency you need to keep your agency running smoothly and hassle-free. Every HP product is designed and tested to provide industry-standard compatibility and investment protection. And, with special maintenance services, easy ordering and flexible financing, HP Federal makes buying the right solution for your organization easier and more convenient than ever.

Attached is the price quotation you requested. When submitting a purchase order directly to HP Federal, please be certain to include the requested information on the Ordering Information page attached to this quotation. Including the necessary information will ensure the accurate and timely processing of your order through HP Federal.

You may click here to view this quote and place an order online or fax in your purchase order at 800-344-9396

-Please reference this contract: FED - GSA SCHED70 COOPERATIVE PURCHASE Contract (GS-35F-446AA-COOP) terms and conditions.

-The terms and conditions of the FED - GSA SCHED70 COOPERATIVE PURCHASE Contract (GS-35F-446AA-COOP) will apply to any order placed as a result of this inquiry; no other terms or conditions shall apply.

-Third party items that may be included in this quote are covered under the terms of the manufacturer warranty, not the HP Inc. warranty.

-This quotation may contain open market products which are sold in accordance with HP Inc's Standard Terms and Conditions. HP Inc makes no representation regarding the TAA status for open market products. If the contract allows for open market products, restrictions may apply as to the number/percentage of open market items that may be quoted/ordered. Open Market limitations vary by contract.

- HP makes no representation regarding the TAA status for open market products. If the contract allows for open market products, restrictions may apply as to the number/percentage of open market items that may be quoted/ordered.

If you should have questions regarding this quotation or need any other assistance, please contact your HP Federal sales representative.

Sincerely,

Ray Valle
Inside Sales Representative
Ordering Information

It's never been easier to place your direct orders with HP. Now you can have fast, accurate service with special options designed to personalize, process and expedite your shipments with higher levels of accuracy. Ordering HP products is as simple as picking up the phone, using the fax machine, or logging onto the HP Public Sector website at http://welcome.hp.com/country/us/eng/solutions/pub_sector.html

Online ordering

With the HP Online Store, you can create quotes with real-time pricing, place an order using a credit card or purchase order, keep up-to-date on the latest product promotions and pricing available on your contract, inquire about order status and view product/price information - all from your desktop PC.

Click here to view this quote and place an order online.

Faxing Option

Faxing your order is convenient, too. Simply fill out your request on your purchase order. Your order will be promptly handled, and you can call a Customer Service Rep to confirm your order.

Personalized Telesales

To provide more personal service to you, our telephone sales and order administration representatives are assigned by territory. This means you can reach a dedicated government, education, or medical sales team every time you call - giving you added value by letting you grow personal relationships with representatives who know your product as well as your special terms and delivery requirements. To request a quote, check product availability, and other related questions, call your Telesales Representative.

Order Accuracy

To ensure the accurate and timely processing of your order, please verify that your purchase order includes the following information:

- Bill-to address,
- Ship-to address,
- Purchase order number,
- Part number, description, and price,
- Contract # and name
- Reseller of choice
- Contact name, phone number, and email address,
- Special delivery requirements
-Requested delivery date
- Signature of authorized purchaser
- Please note that HP Inc. must be listed as the vendor.

Prime Contractors buying against a Federal Supply Sources or Schedules contract must provide a valid Letter of Authorization, and PO must contain the following specific language/paragraph as described in FAR 51.103.

- “This order is placed under written authorization from (name of Government Agency) dated (Date of Letter). In the event of any inconsistency between the terms and conditions of this order and those of your Federal Supply Schedule Contract, the latter will govern.”

- Sample/Editable PDF Purchase Order forms are available at these links -

Tax-Exempt Certificate Requirements

All tax-exempt accounts should have a tax-exempt certificate on file with HP to avoid having sales tax added to their invoice. This certificate needs to be provided only once. If you are ordering for the first time, please include with your order or account application.

HP Credit

HP's financing programs can help your agency purchase or lease HP solutions. To inquire more about a customized financial solution proposal call your Telesales Representative.

Order Tracking and Status

All orders are entered within 24 hours of receipt and are scheduled to ship on a first in first out basis. Orders are shipped within seven days of receipt provided all items are in stock and all necessary information has been properly included on your purchase order. (Remember that ship complete orders can be delayed if a particular item is not currently in stock.) To inquire about the status of your order, you may either call your corresponding Customer Service Representative or check your order status online.

Returned Merchandise

A return material authorization number (RMA) is required for all returns to be processed. Returns may be requested within 30 days of shipment. Please call your HP Customer Service Representative in order to have an RMA assigned. Please have a copy of the packing slip available when you call.

Customer Service and Sales For Public Sector:

Federal Fax Numbers: 800-344-9396, 301-286-0317 (SEWP IV)
## PRICE QUOTATION

**Quote Number:** 10777503

**Quote Date:** December 08, 2015

**Revised Date:** December 08, 2015

**Expires:** January 07, 2016

**Provided by:** Ray Valle

**Contract:** FED - GSA SCHE70 COOPERATIVE PURCHASE (GS-35F-446AA-COOP)

---

Product availability and product discontinuation is subject to change without notice. The prices in this quotation are valid for 30 days from quote date above. Please include the quote number and contract from this quote on the corresponding purchase order. HP INC. PROPRIETARY INFORMATION FOR CUSTOMER USE ONLY. DO NOT SHARE.

---

### Item Information

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Description</th>
<th>Qty.</th>
<th>Unit Price</th>
<th>Extended</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>A8P79A#BGJ</td>
<td>HP LaserJet Pro MFP M521dn printer (Open Market Item)</td>
<td>1</td>
<td>$899.00</td>
<td>$899.00</td>
</tr>
</tbody>
</table>

**A8P79A#BGJ**

- **Product:** HP LaserJet Pro MFP M521dn printer (Open Market Item)
- **In the box:**
  - Printer; HP LaserJet Black cartridge (~6000 pages); Printer documentation and software on CDs (Windows/Mac OS installation CD & Readiris CD including OCR software); Installation guide, Support flyer, Warranty Card; power cord; Fax Cable
- **Cable included?** No, please purchase USB cable separately (On accessories below. Not available for Public Sector orders)
- **Energy Star® Compliant:** Yes
- **All-in-One functions:** Print, copy, scan, fax
- **Print speed:** Black (normal) - Up to 42 ppm
- **Print quality:** Black - Up to 1200 x 1200 dpi
- **Copy resolution:** Black: Up to 600 x 600 dpi
- **Color:** Up to 600 x 600 dpi
- **Scan resolution:** Hardware - Up to 1200 x 1200 dpi
- **Scan resolution, enhanced:** Up to 1200 dpi
- **Two-sided printing:** Automatic (standard)
- **Duty cycle:** Up to 75,000 pages per month
- **ADF capacity:** Standard, 50 sheets
- **Paper trays (std/max):** 2 / Up to 3
- **Input capacity:** (std/max) - Up to 600 sheets/Up to 1100 sheets
- **Output capacity:** (std/max) - Up to 250 sheets / Up to 350 sheets
- **Media sizes:** Letter, legal, oficio
- **Memory:** (std/max) - 256 MB/256 MB
- **Memory Slots:** None
- **Display:** 3.5 inch (8.89 cm) touchscreen, LCD (color graphics)
- **Connectivity:**
  - standard - 1 Hi-Speed USB 2.0 Device; 1 Hi-Speed USB 2.0 Host; 1 Gigabit Ethernet
  - 10/100/1000Base-TX; 1 Telecom; 1 Phone
- **Processor:** 800 MHz

---

**Note:** For detailed warranty information, please link to "URL" for more information [www.hp.com/go/specificwarrantyinfo](http://www.hp.com/go/specificwarrantyinfo).

Sales taxes added where applicable. Freight is FOB Destination.
HP Federal Sales

PRICE QUOTATION

Quote Number: 10777503

Quote Date: December 08, 2015
Revised Date: December 08, 2015
Expires: January 07, 2016

Provided by: Ray Valle
Contract: FED - GSA SCHED70 COOPERATIVE PURCHASE (GS-35F-446AA-COOP)

Product availability and product discontinuation is subject to change without notice. The prices in this quotation are valid for 30 days from quote date above. Please include the quote number and contract from this quote on the corresponding purchase order. HP INC. PROPRIETARY INFORMATION FOR CUSTOMER USE ONLY. DO NOT SHARE.

<table>
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<tr>
<th>Item</th>
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<th>Description</th>
<th>Qty.</th>
<th>Unit Price</th>
<th>Extended</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Standard paper handling accessories - Input: 100-sheet multipurpose tray, 500-sheet input tray 2, 50-sheet automatic document feeder. Output: 250-sheet output bin, 100-sheet rear output bin. Optional paper input accessories - Optional 500-sheet paper tray (add up to 1 trays) Operating systems - Windows 8, Windows 7 32-bit and 64-bit, Windows Vista 32-bit and 64-bit, Windows XP 32-bit (SP2 or higher); Windows Server 2008 32-bit and 64-bit, Windows Server 2003 32-bit (SP3 or higher); Mac OS X v 10.6.8 and later; Linpus Linux (9.4, 9.5) Operating System Continued - N/A Warranty - One-year, on-site limited warranty</td>
<td></td>
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SUB TOTAL : $899.00

TOTAL PRICE : $899.00

To ensure the accurate and timely processing of your order, please include quote # 10777503 on your Purchase Order.

GET MORE FOR YOUR MONEY

Make the most of your budget and protect against technology obsolescence. Lease these HP products with a purchase price of $899.00 for 36 months for as little as $27.91 per month. At the end of the lease, send the equipment back to HP Financial Services and upgrade to new technology or purchase the equipment at its fair market value.*

GET MORE WITH HP FINANCIAL SERVICES

For more information, call Hewlett-Packard Financial Services Company at 1-888-277-5942 and talk to a financial services representative who specializes in supporting government and education entities.

Note: For detailed warranty information, please link to "URL" for more information www.hp.com/go/specificwarrantyinfo. Sales taxes added where applicable. Freight is FOB Destination.
Product availability and product discontinuation is subject to change without notice. The prices in this quotation are valid for 30 days from quote date above. Please include the quote number and contract from this quote on the corresponding purchase order. HP INC. PROPRIETARY INFORMATION FOR CUSTOMER USE ONLY. DO NOT SHARE.

<table>
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<th>Description</th>
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<th>Extended</th>
</tr>
</thead>
</table>

* The monthly payment amount is for a lease commencing on or before 1/7/2016 with a term of 36 months and a fair market value purchase option at the end of the lease term. This and other leasing and financing options are available through Hewlett-Packard Financial Service Company (HPFSC) or one of its affiliates to qualified education and state and local customers in the U.S. and subject to credit approval and execution of standard HPFSC documentation. Fees and other restrictions may apply. This is not a commitment to lease. Rates and payments are subject to change at any time without notice. Leasing and financing options for Federal governmental agencies (subject to a $50,000 minimum) are available from Hewlett-Packard Company.

Comments:

Note: For detailed warranty information, please link to "URL" for more information [www.hp.com/go/specificwarrantyinfo](http://www.hp.com/go/specificwarrantyinfo). Sales taxes added where applicable. Freight is FOB Destination.
To: CUNY Bronx CC  
2155 UNIVERSITY AVE  
BRONX, NY 10453

In reply to your request:
HPN Brooklyn College

<table>
<thead>
<tr>
<th><strong>HPE Quote #</strong></th>
<th><strong>Created</strong></th>
<th><strong>Expires</strong></th>
</tr>
</thead>
</table>

Your HPE Sales Contact:
Danielle James,
Phone: +1 844 5794351 ext. 7815781
Fax:
Email: danielle.b.james@hpe.com

Payment Terms:
Net 30 days from the invoice date, subject to credit approval.

Submit Purchase Order To:
U.S. SLED Order Management,
Phone: 1-800-825-2329
Fax: 1-800-825-2329
Email: US-SLED-ORDERS@hpe.com

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<tr>
<th><strong>Solution</strong></th>
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<tr>
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<tr>
<td>Software:</td>
<td>US$ 0.00</td>
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<td>Support:</td>
<td>US$ 0.00</td>
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<td>Installation:</td>
<td>US$ 0.00</td>
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<tr>
<td>Other:</td>
<td>US$ 0.00</td>
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<td>Sub-Total:</td>
<td>US$ 2,818.52</td>
</tr>
<tr>
<td>Shipping and Handling:</td>
<td>US$ 0.00</td>
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<tr>
<td><strong>Grand Total:</strong></td>
<td><strong>US$ 2,818.52</strong></td>
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Estimated delivery upon PO receipt (in business days): 16

Delivery Method:
Standard
Delivery Duty Paid
Shipping & Handling and Special Handling Exempt
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<td>HP 2920-24G Switch</td>
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<td>HP No Additional Support Required</td>
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</table>

Grand Total: US$ 2,818.52
This quote contains the use of actual GSA pricing, subject to the Cooperative Purchasing Arrangement negotiated under Hewlett Packard Enterprise’s GSA Schedule Contract. This quotation cannot be combined with any other purchase agreement or State, Local or Educational contract.

This quote is prepared using a contract identifier GS-35F-025DA-COOP to show it is offered under the Cooperative Purchasing Arrangement of the GSA contract GS-35F-025DA. Should you desire to place an order as a result of this GSA Cooperative Purchasing price quotation, please reference Contract Number, GS-35F-025DA-COOP on your purchase order. Products quoted are in accordance with the terms and conditions of GSA Contract GS-35F-025DA.

Open Market: This quote may contain open market items and must be so declared. Open market items are firm for 90 days and are subject to Hewlett Packard Enterprise Customer Terms-Portfolio. No other terms shall apply. Hewlett Packard Enterprise makes no representation as to the TAA status of open market products:

Ln 300

“For inquiries regarding this quote please contact:

RFQ-US-SLED@hpe.com

Upon issuing a Purchase Order to Hewlett Packard Enterprise please include the following:

Hewlett Packard Enterprise listed as the Vendor
Bill to & ship to addresses
PO# and valid Hewlett Packard Enterprise quote number
Hewlett Packard Enterprise Purchase Agreement # (if applicable)
Contact name, phone number & e-Mail address
For electronic software include the end user e-Mail Address
Requested delivery date (per SLA requirements) and any special delivery requirements
Tax status
If support is ordered provide the end user’s name and phone number. For upgrades include the serial number or the support identifier for contract entitlement.

*Prices are exclusive of use, sales value added and other taxes. Should the item(s) being quoted herein be exempt from sales tax please include the appropriate valid tax exemption certificate referencing Hewlett Packard Enterprise as the vendor.

*If quoted herein, Remarkedeted Products are fully remanufactured and carry new product warranty. Purchase is subject to inventory availability at receipt of order. Inventory may not be reserved. Hewlett Packard Enterprise reserves the right to substitute new components if appropriate, or to cancel orders by notifying the customer if necessary components are unavailable.

*If quoted herein, Hewlett Packard Enterprise Promotions must be ordered as quoted, no substitutions will be allowed. POs must be received on or prior to the expiration date of the quote or special promotion whichever comes first.

*If quoted herein, Hewlett Packard Enterprise Consignment/Demo equipment is currently at the location listed on this quote. Issuing a PO against this formal quotation will imply acceptance and delivery of the Consignment/Demo inventory. The standard warranty applicable to new equipment will apply. Some demo equipment may contain products that are remanufactured to be functionally equivalent to new.”
Student Technology Fee Proposal #2016-88
Classroom Technology Digital Cinema Packages Beginning to Advanced Digital Filmmaking Camera Packages, Transitioning from Celluloid to Digital Cinema

School: School of Visual, Media and Performing Arts
Department/Office: Film
Applicant Name: Spivey, Kelly
Additional Applicant(s): Massood, Paula
Parmar, Vinit

Primary Contact for Proposal
   Email Address: kelly.spivey10@brooklyn.cuny.edu
   Phone: ext: 2618
   Estimated total cost: $ 58,100.00

Description of Proposed Project:
Funding for our Classroom Technology Digital Cinema Packages will allow beginning, intermediate and advanced students the opportunity to shoot on industry standard digital cinema capturing devices. The SONY A7s II cameras will enable students to work on advanced 4k 35mm film projects without the added expense of having to go off campus to rent equipment.

Beginning Students:
As part of our gradual move to digital technology, we now include digital cinematography in our film program, starting with our Film Production I courses. Each semester approximately 140 beginning film students share only 20 Canon T3i DSLR camera packages. The Canon T3is have enable us to teach digital cinema in Film Production I courses and both professors and students have been very happy with the quality and performance of these cameras. But there are not enough digital cameras for students, as 20 cameras are being shared by all 140 students. This funding will be used to increase the amount of packages we can offer.

Beginning production courses include 4 to 5 sections of Film Production 1, 1 section of Documentary Production, and 1 or 2 sections of Directing I. Students use these packages in class and to complete assignments outside of class time.

Intermediate and Advanced Students:
Each semester approximately 160 intermediate and advanced students share a variety of only 20 intermediate/advanced digital cameras, and 13 of these were purchased more than 5 years ago, making them nearly obsolete. As a result, many students opt to rent cameras off campus. Offering 4 new SONY A7s II Digital Camera packages will save students money and will allow productions to be produced with more support from faculty and staff.

Our Intermediate and Advanced courses each semester include: 2 sections of Cinematography Workshop, 2 sections of Thesis Production, 2 sections of Directing Workshop II, and 1 section of Advanced Cinematography.

We will purchase:
6 beginning/intermediate packages of: Canon T5i DSLR.
4 intermediate/advanced packages of: SONY A7s II.

We will purchase the necessary support equipment such as sound equipment, sound gear, tripods and lighting with this funding.

It should be noted that we offer Film Production 1 to students of any major.

Finally, acquiring this equipment fits the STF goal of providing technology tools to support college-sponsored student activities.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The impact on student’s learning will be felt immediately. Each student will have more time to actually operate
the equipment, giving them hands-on experiential learning opportunities. Currently, students have to share the same equipment so they aren't able to take the time necessary to thoroughly learn how to handle the gear properly. This leads to mishandled equipment and increased wear and tear. With this purchase, student's expertise and skill levels will increase and we will have less need for repairs as the load on the equipment will be lessened and the students will have more opportunities to learn how to handle the gear properly.

We have high educational standards, and students aim to make the most high quality cinematic projects possible. The addition of the advanced cameras packages will save students from having the expense of renting appropriate equipment off campus. Instead they will have access to cinema camera packages on campus to shoot projects at no additional cost.

Our main objective is to ensure that students gain technical skills that will enable them to manifest their creative potential and to gain professional employment in their field.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
   
   see below

b. Who will supervise the facility and how will that be funded ongoing:

   Michael Irgang is the film department's full time CLT who runs the equipment room where this technology will be accessed. The department also employs 2 part-time College Assistants and one full-time Senior CLT who will assist with the access to this equipment.

We provide access to checkouts 30 hours a week, with rotation between checkouts and returns. Students will also gain access during class time when the professor has checked out the equipment.

c. What physical space will be used to host the facility, and who has authorized its use:

   Our current equipment room, 224WEB will house this technology. This has been authorized by Chair, Vinit Parmar.

d. If any renovations or furnishings will be required to support the project, how will they be funded?

   None are needed.

Please describe how many students will be served each term through the funding of this project, and through what means:

Each semester there are approximately 140 students enrolled in beginning courses and 160 enrolled in intermediate to advanced courses for a total of approximately 300 students. Each student will use digital camera technology inside the classroom and outside of class in groups and on individual projects. They gain access to the equipment either through their professor or through the equipment room in the film department.

How will projected outcomes be assessed?

The equipment room will quickly be able to fulfill professor's requests for cameras for their classroom curriculum. Student requests for equipment checkouts for assignments will be more fully supported, and the overall quality of the films produced will rise. The wear and tear of the existing equipment will be reduced and equipment repair costs will decline. These are the ways that the department will be able to determine the benefits of this project.
**BILLING ADDRESS:**
BROOKLYN COLLEGE
Att: ACCOUNTS PAYABLE
2900 BEDFORD AVE
BROOKLYN, NY 11210 USA
(718) 951-5664

**SHIPPING ADDRESS:**
BROOKLYN COLLEGE
Att: ACCOUNTS PAYABLE
2900 BEDFORD AVE
BROOKLYN, NY 11210 USA
(718) 951-5664

Customer No: 1815747

**SKU#** | **Item** | **Qty** | **Price** | **Total**
--- | --- | --- | --- | ---
TSRD70D | TASCAM DR-70D DSLR 4-CH AUDIO RECORDDR | 10 | 184.50 | 1,845.00
Mfg Item#: DR-70D

ISONPFW50 | SONY NPFW50 INFOLITHIUM RECHARGEABLE 7. | 4 | 39.95 | 159.80
Mfg Item#: NPFW50

IDSEPD480GB | SANDISK 480GB EXTREME PRO SS DRIVE | 3 | 183.00 | 549.00
Mfg Item#: SDSSDXPS-480G-G25

WC194000 | WOODEN CAMERA-E-MNT TO PL MNT PRO(FS7) | 4 | 422.00 | 1,688.00
Mfg Item#: 194000

IAEST16 | IKAN SONY A7S CAMERA RIG (TILTA) | 4 | 319.00 | 1,276.00
Mfg Item#: ES-T16

TOSDXEUE64G | TOSHIBA 64GB EXCERIA UHS-I SDXC MEM CARD | 4 | 39.95 | 159.80
Mfg Item#: PF5064U-1EUS

ISO16354E | SONY**16-35 F/4 T* VARIOTSR ZA OSS LNS | 4 | 1,348.00 | 5,392.00
Mfg Item#: SEL1635Z

SCSC001 | SACHTLER DR. BAG - 1 | 4 | 113.00 | 452.00
Mfg Item#: SC001

LLO110 | LOWEL OMNI-LIGHT | 7 | 132.00 | 924.00
Mfg Item#: O110

LLP210 | LOWEL PRO-LIGHT | 7 | 109.00 | 763.00
Mfg Item#: P210

LLT120 | LOWEL TOTA-FRAME | 7 | 19.00 | 133.00
Mfg Item#: T120

LLUN33 | LOWEL UNI-STAND | 14 | 65.00 | 910.00
Mfg Item#: UN33

LMGCA | GCA VIDEO LAMP 120V 250W | 14 | 7.00 | 98.00
Mfg Item#: GCA

LMFTKBP | LOWEL FTK STUDIO LAMP 500W 120V | 7 | 11.00 | 77.00

**Ship Via:** Standard Ground Delivery

**Salesman:** 00517 - ShawnB

**Printed By:** SHAWNB 12/08/15 02:52 PM

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(718) 951-5664

**SHIPPING ADDRESS:**
BROOKLYN COLLEGE  
Att: ACCOUNTS PAYABLE  
2900 BEDFORD AVE  
BROOKLYN, NY 11210 USA  
(718) 951-5664

**Customer No:** 1815747  
**Customer PO:** Quote  
**Terms:**

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**Salesman:** 00517 - ShawnB

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Att: ACCOUNTS PAYABLE  
2900 BEDFORD AVE  
BROOKLYN, NY 11210 USA  
(718) 951-5664

## Shipping Address:
BROOKLYN COLLEGE  
Att: ACCOUNTS PAYABLE  
2900 BEDFORD AVE  
BROOKLYN, NY 11210 USA  
(718) 951-5664

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**Printed By:** SHAWNB 12/08/15 02:52 PM
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Thank you for being a repeat Customer.

This quote was prepared by your sales representative, Shawn Bazinet.
To place order or for any help, call Shawn Bazinet at (888) 582-2500 or email at shawnb@adorama.com

To email Customer Service please go to www.adorama.com/email

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Tax: .00
Quote Total: 58108.80

Ship Via: Standard Ground Delivery

Salesman 00517 - ShawnB
Printed By: SHAWNB 12/08/15 02:52 PM
Student Technology Fee Proposal #2016-90
Cinematic Upgrade to Support SMART Podium Classroom Support Technology Bringing our Technical Equipment up to the level of our SMART room technology

School: School of Visual, Media and Performing Arts
Department/Office: Film
Applicant Name: Spivey, Kelly
Additional Applicant(s): Massood, Paula
Parmar, Vinit

Primary Contact for Proposal
   Email Address: kelly.spivey10@brooklyn.cuny.edu
   Phone: ext: 2618
   Estimated total cost: $ 14,000.00

Description of Proposed Project:
The Film Department screens films in cinema studies courses for anywhere from 20 to 30 hours per week per room in rooms 214 and 220 of the WEB building. This has taken a toll on our 6-year-old BluRay decks in each room. The BluRay deck in 214 stopped working and so temporarily have to use a consumer quality deck from our back up equipment. We need to purchase cinema quality, NTSC/PAL, multi-region, BluRay decks that can be controlled via RS 232 to be compatible with our Crestron Controller. Kenny Jackson, the engineer from ITS who has programmed our Crestron Controller in these rooms has advised us that the optimal deck for our 1231 sq. foot cinemas are Oppo BluRay Decks BDP-103.

We also need new audio amplifiers. Our SMART Podium Technology in WEB 214 and 220 currently control a receiver via infrared signal and this is not stable enough to ensure solid and reliable playback and responsiveness. Kenny Jackson has advised that we need new Audio Amplifiers with RS232 for the smart podium playback. We will need to update our speakers to playback hi-fidelity surround with front subwoofer playback capabilities. We will purchase sound absorption panels for both 214 and 220 as well, so that the sound plays back correctly.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
Our cinema studies classes in WEB 214 and WEB 220 have been interrupted frequently due to the equipment problems as a result of our BluRay decks and our Audio Receiver signals routing via Infrared. This is not a solid signal routing option, resulting in dropping of audio, and the need to use a floater BluRay deck that is only consumer quality. The floater BluRay cannot be accessed using the SMART touch screen, causing further delays. These issues will be resolved with the upgrade of this equipment, providing less down time during important class time for students. The impact will be felt immediately. This means less calls to ITS for assistance. As ITS staff are across campus, the downtime in classrooms can be substantial. As much as we can, we try to resolve issues without calling ITS, but due to the limited access to the locked SMART podiums we do need to have them come an assist us. This new equipment will provide uninterrupted class time, benefiting students immediately.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a.   How many hours per week the lab will be open:
not a lab
b.   Who will supervise the facility and how will that be funded ongoing:
The classrooms: 214 and 220 in the WEB building, will house this equipment as part of our Smart Podium technology. This will be supervised by fulltime Senior CLT, Kelly Spivey and fulltime CLT, Michael Irgang.
c.   What physical space will be used to host the facility, and who has authorized its use:
The classrooms: 214 and 220 in the WEB building. The chair, Vinit Parmar authorizes their use.
d.   If any renovations or furnishings will be required to support the project, how will they be funded?
None are needed.
Please describe how many students will be served each term through the funding of this project, and through what means:
All students in the Film Department will be impacted by this upgrade, as everyone is required to take cinema studies courses. Students from other department can take film studies courses as electives as well. Each semester, these rooms are in constant use, with approximately 350 students viewing films in these rooms.

How will projected outcomes be assessed?
It is very important to our film faculty that we screen films to students for study in classrooms at the highest quality possible. Having cinema quality BluRay players will provide immediate beneficial outcomes for our student’s education. Students are asked to study, write papers, and take exams based on the films they watch in these rooms. Having consistent playback, without interruption and at the highest quality possible, will provide an excellent educational experience for our students. The audio amplifier will provide responsive audio control allowing for playback as the intended by the sound designer and film director. Sound is said to be up to 65% of the film viewing experience, which is why the new surround speakers and sound absorption panels are crucial to the project.
## Shopping Cart

### Step 1 of 3: Confirm Cart Contents

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**Sub Total:** US$ 1,056.00

**Shipping Estimate:** US$ 35.00

- **Country:** United States of America
- **State:** New York
- **Shipping Method:** Standard

Other available shipping methods:
- USPS Priority Mail - US$ 69.30 (add'l US$ 34.30)
- FedEx 3Day - US$ 78.00 (add'l US$ 43.00)
- FedEx 2Day - US$ 96.00 (add'l US$ 61.00)
- FedEx Overnight - US$ 147.00 (add'l US$ 112.00)

Select desired shipping method during step 3 of checkout.

**Grand Total:** US$ 1,091.00

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**OPPO Store Help**

See your estimated shipping cost by selecting your State & Country/Region.

California sales tax will be added to any order shipping to a California address.

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Sold To: Julie  
Brooklyn College  
2900 Bedford Ave  
Box 711  
Attn: Accounts Payable  
BROOKLYN, NY 11210

Bill Phone: (718)951-5664  
Work Phone: (718)951-5421 Ext.: A/P  
Fax Phone: (718)951-5423

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<td>(Z900016000)</td>
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| 4   | AURALEX METRO LENRD BASS TRAPS (CHARCOAL)/REG  
   *This Is A Special Order Item, And Is Not Returnable.* | AUMTLBTC | (METROLENCHA) | 236.00 | 944.00 |
| 3   | AURALEX S3HT SONOSUDE SYSTEM (BLACK/BLACK)/REG  
   *This Is A Special Order Item, And Is Not Returnable.* | AUS3HTBB | (S3HTBLKBLK) | 859.00 | 2,577.00 |
| 2   | JBL LSR6325P 5.1 SYSTEM w/6312SP SUB/REG  
   *This Is A Special Order Item, And Is Not Returnable.* | JBLSR6325P51 | (LSR6325P51) | 2,838.00 | 5,676.00 |

**CONSISTS OF:**

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| 10  | JBL 5.25" NEAR FIELD MONITOR BI-AMP (SNGL)/REG  
   *This Is A Special Order Item, And Is Not Returnable.* | JBLSR6325P1 | (LSR6325P1) | 2,838.00 | 5,676.00 |
| 2   | JBL 12" ACTIVE SUBWOOFER/REG  
   *This Is A Special Order Item, And Is Not Returnable.* | JBLSR6312SP | (LSR6312SP) | 749.00 | 1,498.00 |
| 2   | PIONEER PIONEER ELITE 7.2CH CLASS D3 AV RCEIVR/REG | PISC91 | (SC91) | 749.00 | 1,498.00 |

This Is A Special Order Item, And Is Not Returnable.

Continued on Next Page ...
Bid No.: 576465100

Date | Customer Code | Terms | Salesperson | Ship Via
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12/01/15 | 1305377 | N/A | Slsm | MULTIPLE

Please note: please note:

**********UPCOMING SCHEDULE CHANGE **********

B&H SuperStore will be closed on Friday December 25th
We will reopen Sunday December 27th at 10AM

We will be open on New Year's Day
Friday January 1st from 9AM-1PM
Certain items may be enforced by vendor to sell at the vendor-imposed price posted at the time of order.

Payment Type - NO PAYMENT TYPE SELECTED

| Sub-Total: | 12,813.00 |
| Shipping: | 130.39 |
| Total: | 12,943.39 |
Description of Proposed Project:
The Department of Theater is requesting the purchase of an ETC ION LIGHTING CONSOLE to be used in coursework in the department’s classes in lighting design and theater technology. We have attached a quote for the ETC ION Lighting Console as requested for the Brooklyn College’s IT department. This proposal includes: One ETC Ion 1000 Lighting Console, one ETC Ion Console Universal Fader wind 2x10, and two 19 inch monitors.
The Ion Console is being requested for use in our Light Lab to allow our design and tech students the opportunity to learn how to properly use the console. This console is the state of the art technology that is used in most professional theaters throughout the country. It offers our students the opportunity to become fluent in the processes and capabilities of the console as they work toward completing design, running crew, and assistant design assignments, and prepare them for their professional careers. This console would replace the ETC Express 250 Lighting console which is outdated and limiting. Unlike the Express, the Ion supports the programming of intelligent lighting and LED Fixtures. As most productions, including our student productions, include the use of intelligent lighting and LED fixtures, having the opportunity to learn on and practice in our light lab is imperative for them to be able to fulfill their assignments properly.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
By acquiring this technology, students taking the below-mentioned courses will have an ability to use a tool that is an essential industry standard in current practices of lighting design and theater technology. Without this technology, our students, who are preparing their lighting designs for class projects and school productions, will be extremely limited. They will not have the proper time and venue to learn all of the capabilities that the ION Lighting Console offers, ultimately negatively impacting their design capabilities. In most cases, not having this console will limit the student’s ability to use intelligent lighting equipment in their designs as they have not had the proper time to learn how to program the equipment. In addition, the students who are the design assistants and light board operators require the same amount of time, if not more, in learning all aspects of the console so that they can support the lighting designer as they realize the design assignments. Having this console in the Light Lab will allow them to have time to learn before technical rehearsals begin.

Objectives: This Console will be used to facilitate the following classes:
THEA 7411X ? Rendering Techniques for the stage designer
THEA 7413X ? Costume Construction for the stage
THEA 7422X ? 2 Dimensional CADD (Computer Aided Design and Drafting)
THEA 7423X - 3 Dimensional CADD and Rendering
THEA 7415X ? Stagecraft
THEA 7431X ? Scene Design
THEA 7433X ? Costume Design
THEA 7435X - Lighting Design
THEA 7432X ? Advanced Scene Design
THEA 7434X ? Advanced Costume Design
THEA 7436X ? Advanced Lighting Design
THEA 7442X ? Theater Design and Planning
THEA 7441X - Advanced Studies in Design
THEA 7414X ? Scene Painting
THEA 7412X ? Costume Rendering Techniques
THEA 2310 ? Stagecraft
THEA 2320 ? Costume Construction for the stage
THEA 2311 ? Prop Construction
THEA 2313 ? Scene Painting
THEA 3331 ? Scene Design
THEA 3333 ? Scene Design 2
THEA 3341 ? Lighting Design
THEA 4704 ? 2 Dimensional CADD
THEA 4705 ? 3 Dimensional CADD and Rendering

Additionally the students in the lighting design classes and lab classes often need the opportunity to work with the console as part of their class or lab assignments. With the current ETC Express lighting console they are getting a very limited and out of date training opportunity. As our performance spaces are outfitted with the Ion Consoles, having our training lab fitted with an outdated and different technology does not allow our students any opportunity to learn and practice on the Ion Console, until just before technical rehearsals begin as the consoles in the theaters are in constant use.

Students enrolled in the following Practicum and Laboratory classes will benefit from this type of use.
THEA 4701- THEA 4706 - Laboratory
THEA 7721X-THEA 7724X - Practicum

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
60-85

b. Who will supervise the facility and how will that be funded ongoing:
SCLT Michael Hairston, SCLT Jeff Stiefel, and SCLT Andrew Riedemann oversee the use of the equipment. No additional expenditure will be needed to maintain this lab or this technology.

c. What physical space will be used to host the facility, and who has authorized its use:
This equipment will be used in the existing Theater Department? s Lighting Design Lab. The lab is authorized to be used by all students in the design and tech classes and by those students who have de

d. If any renovations or furnishings will be required to support the project, how will they be funded?
NONE ARE REQUIRED.

Please describe how many students will be served each term through the funding of this project, and through what means:
This technology will serve an annual enrollment of approximately 150 students detailed in the courses listed above. The Ion Lighting Console offers the students the opportunity to learn all of the capabilities and programming syntax that this, the current industrial standard, console offers. Having this console in the light lab will allow the students the time to fully understand the console prior to having to utilize it as part of their class and design assignments. Specifically for a student? s design assignments, once the technical rehearsal begin the students? need to be fully fluent on how to use the console in order to complete their assignments. For each production the designer, there assistants, and the board ops need to all be clear on the capabilities and process in order to support the technical rehearsal and the designer as they each fulfill their individual assignments.

How will projected outcomes be assessed?
We will be able to determine the successful outcome by observing a higher level of proficiency and completion of classroom exercises and projects by our students. In addition, we will be able to provide and measure the successful implementation of training on a piece of equipment that is essential to current and expected practices of Lighting Design and Theater Technology. This technology is the current industrial standard for use in productions as it? s the console that is found in most professional theaters in New York and throughout the country. This will allow the lighting design team the ability to support all other areas of production including scenery, props, actors, and the directors as they all work together telling the story found in the play. This is a critical training aspect that our students do not currently have access to.
Enhancing Student Career Opportunities Using Bloomberg Terminals

Description of Proposed Project:

What is a Bloomberg Terminal? It is a computer system provided by Bloomberg L.P. that enables professionals in finance and other industries to access the Bloomberg Professional service through which users can monitor and analyze real-time financial market data and place trades on the electronic trading platform. Over 700 universities around the world offer Bloomberg for Education. The Koppelman School of Business has been a subscriber to the Bloomberg Professional service since 2013, and currently have twelve Bloomberg Terminals located in the Brooklyn College library. Since the time of installation, the following equipment has been used to power the Terminals:

Processor: Intel Core 2 1.86 GHz
Memory: 8 GB ram
Video: Dual port graphics 256 MB of video memory DirectX 10.x compatible

Recently, students have not been able to fully utilize the terminals because the equipment used to power the Terminals is no longer adequate. These are the new requirements:

Processor: Intel 4th Gen i7 3.0 GHz or better
Memory: Minimum 8 GB Ram
Video: Dual port graphics minimum of 512 MB of video memory DirectX 11.x compatible

The requested funds will be used to upgrade equipment necessary to power the Bloomberg Terminals.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?

Bloomberg for Education brings the pace and excitement of real business into the classroom. Students gain hands-on experience using the same information and technology relied on by financial professionals all over the world and, subsequently, gain an edge in a competitive job market. Students using the Bloomberg Terminals gain this edge by having the opportunity to (1) develop their research skills and enrich their classroom experience, (2) develop their analytical skills, (3) make decisions based on real events and real data, and (4) prepare for a challenging employment marketplace. Moreover, the Bloomberg Terminals serve as a resource for both students and professors. They enable students to become familiar with tools used in financial services, thereby reinforcing classroom theory, while professors can use it to further their own research.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?
Please describe how many students will be served each term through the funding of this project, and through what means:
Over 500 business students use the terminals each semester. As more and more of our professors assigned projects that require industry research, we expect this number to increase fairly rapidly. Moreover, as the presence of the terminals become more well-known by other schools on the Brooklyn College campus, students in different majors will also use the terminals to enhance their employment opportunities once the graduate.

How will projected outcomes be assessed?
The primary mission of the Koppleman School of Business is preparing students for professional careers with an expected outcome of student success. We assess our effectiveness in preparing our students for professional careers by how successful they are securing internships and permanent employment in their field of study. A Brooklyn College alum recently donated $1 million dollars to the Koppleman School of Business to establish a financial investment institute that provides our students with hands-on-investment experience. The Bloomberg Terminals are used extensively by students enrolled in the institute. Assessment of these students’ preparation and their progress toward career success is ongoing.
# Price Summary

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Note: All tax quoted above is an estimate; final taxes will be listed on the invoice.
Dear Customer,

Your quote is detailed below; please review the quote for product and information accuracy. If you find errors or desire changes, please contact me as soon as possible.

Regards,
Melani Borger

Order this quote easily online through your Premier page, or if you do not have Premier, using Quote to Order

**Product Details**

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Estimated Delivery Date: 11/30/2015  
Contract Code: 81agq  
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#### Description | Quantity | Unit Price | Subtotal Price

| Dell Latitude E7450/7450 CTO | 1 | $1,165.93 | $1,165.93 |

**Estimated Delivery Date:** 12/01/2015  
**Contract Code:** 81agq  
**Customer Agreement No:** 2014PCAggBuy-PT65340

### Description

- **210-ADBD**  
  Dell Latitude E7450/7450, CTO  
  Quantity: 1  
  Unit Price: $-  
  Subtotal Price: $-

- **379-BCBE**  
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  Quantity: 1  
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- **536-BBBM**  
  Windows 7 Professional English/French 64bit (Includes Windows 8.1 Pro license)  
  Quantity: 1  
  Unit Price: $-  
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- **338-BFKD**  
  Intel Core i7-5600U Processor Base, UMA Graphics, Smart card Reader, E-Dock  
  Quantity: 1  
  Unit Price: $-  
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- **658-BCSB**  
  Microsoft(R) Office trial  
  Quantity: 1  
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- **370-AAEO**  
  16GB (2x8GB) 1600MHz DDR3L Memory  
  Quantity: 1  
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- **400-AGKN**  
  80GB Solid State Drive Latitude  
  Quantity: 1  
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- **421-9984**  
  Dell Data Protection Encryption Personal Edition Digital Delivery  
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- **954-3455**  
  Dell ProSupport for Software, Dell Data Protection Encryption Personal Edition, 1 Year  
  Quantity: 1  
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- **555-BCGK**  
  Dell Wireless 1560 (802.11ac 2X2 + Bluetooth 4.0)  
  Quantity: 1  
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- **580-ACKJ**  
  Internal Single Pointing Keyboard (English)  
  Quantity: 1  
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- **631-AALQ**  
  No Out-of-Band Systems Management  
  Quantity: 1  
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- **346-BBLZ**  
  Smart Card Reader only (Single Pointing Keyboard)  
  Quantity: 1  
  Unit Price: $-  
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- **319-BBCZ**  
  LCD Bezel Non-Touch with Camera and Microphone  
  Quantity: 1  
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- **391-BBTB**  
  14.0” Non-Touch HD (1366x768) Anti-Glare WLED LCD, WLAN only capable  
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- **406-BBEX**  
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- **452-BBSE**  
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- **650-0028**  
  McAfee SecurityCenter 30 days  
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  Unit Price: $-  
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- **620-AASU**  
  Windows 8.1 DVD OS Recovery(English)  
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- **450-AAYT**  
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- **430-XXYG**  
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Important Notes

Terms of Sale

This quote is valid for 30 days unless otherwise stated. Unless you have a separate written agreement that specifically applies to this order, your order will be subject to and governed by the following agreements, each of which are incorporated herein by reference and available in hard copy from Dell at your request:

If this purchase is for your internal use only: Dell's Commercial Terms of Sale (www.dell.com/CTS), which incorporate Dell's U.S Return Policy(www.dell.com/returnpolicy) and Warranty (www.dell.com/warrantyterms).

If this purchase is intended for resale: Dell's Reseller Terms of Sale (www.dell.com/resellerterms).

If this purchase includes services: in addition to the foregoing applicable terms, Dell's service contracts and related service terms (www.dell.com/servicecontracts/global).

If this purchase includes software: in addition to the foregoing applicable terms, your use of the software is subject to the license terms accompanying the software, and in the absence of such terms, then use of the Dell-branded application software is subject to the Dell End User License Agreement - A Version. (www.dell.com/AEULA) and use of the Dell-branded system software is subject to the Dell End User License Agreement - S Version (www.dell.com/SEULA) (the "End User License Agreements").

You acknowledge having read and agree to be bound by the foregoing applicable terms in their entirety. Any terms and conditions set forth in your purchase order or any other correspondence that are in addition to, inconsistent or in conflict with, the foregoing applicable online terms will be of no force or effect unless specifically agreed to in a writing signed by Dell that expressly references such terms.

Pricing, Taxes, and Additional Information

All product, pricing, and other information is valid for U.S. customers and U.S. addresses only, and is based on the latest information available and may be subject to change. Dell reserves the right to cancel quotes and orders arising from pricing or other errors. Please indicate any tax-exempt status on your PO, and fax your exemption certificate, including your Customer Number, to the Dell Tax Department at 800-433-9023. Please ensure that your tax-exemption certificate reflects the correct Dell entity name: Dell Marketing L.P.  Note: All tax quoted above is an estimate; final taxes will be listed on the invoice. If you have any questions regarding tax please send an e-mail to Tax_Department@dell.com.

For certain products shipped to end-users in California, a State Environmental Fee will be applied to your invoice. Dell encourages customers to dispose of electronic equipment properly.
Description of Proposed Project:
With NY teacher certification requiring a video component the SOE is proposing purchasing 40 Kodak PlayTouch Video Camera (Black) & 40 Pedco Ultrapod 1 Tabletop Tripod ? Black which will be shared amongst the CBSE, ECAE & SEED departments. In years past each department has written individual proposals which have been denied recently. In cases a few years ago when they were approved the cameras brought by the STF were Flip Cameras which is a company no longer in business. This new proposal will have the cameras stored and managed by the SOE Senior CLT Jorge Tucker.

Here are quotes based on Amazon.com

-> http://www.amazon.com/Kodak-PlayTouch-Video-Camera-Black/dp/B003VTZE4Y

-> http://www.amazon.com/Pedco-UltraPod-Lightweight-Camera-Tripod/dp/B000ANCPNM

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
Students will be able to sign up for newly approved trainings on usage of cameras as well as EdTPA video configurations. By being able to have the best possible equipment as well as training on both the equipment as well as best techniques when filming our students will increase their chances of being by EdTPA certification.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
Student Teaching students for each of the 3 SOE departments (CBSE, ECAE & SEED) will have access to the cameras. The total student body who are currently taking student teaching courses is approximately 400.

How will projected outcomes be assessed?
SOE is dedicated to providing its student body all means to be able to be certified with NY after graduation. By providing trainings on all aspects of the test we believe we can accomplish this task.
Student Technology Fee Proposal #2016-71  
Photo equipment update for archaeology classes and field schools

School: School of Natural and Behavioral Sciences  
Department/Office: Anthropology and Archaeology  
Applicant Name: Bankoff, Arthur  
Additional Applicant(s): H. Arthur Bankoff  
Primary Contact for Proposal  
Email Address: ABANKOFF@BROOKLYN.CUNY.EDU  
Phone: 718 951 5507  
Estimated total cost: $3,700.00

Description of Proposed Project:  
The proposal requests funds for updating technical equipment used for archaeological, anthropological, and geological field schools given at Brooklyn College. Specifically, we request funding for a new Canon EOS 5D Mark III (body only) camera and a ProDrone Byrd Premium photo drone.

The drone costs $1400; the camera body costs $2300.

How will this request have a direct impact on student learning or student life?  
What are the objectives of this project?  
The equipment will be used in field schools for training students in the current technology available to archaeologists, anthropologists, and geologists in the field. The camera is compatible with lenses that are already used in our field and lab courses. It is a significant upgrade from our current equipment. The photo drone is new equipment.

Photodocumentation is a crucial part of fieldwork, whether archaeological, anthropological or geological. Students should be trained on equipment they will use in the field as professionals or volunteer participants. Another new technical advance is the use of drones as aerial photographic platforms. This democratization of necessary documentation (prior to this, only planes or balloons were used for taking aerial photos, a large expense) allows students to participate fully in another aspect of the fieldwork. In both cases, the students will benefit from the experience of learning on equipment current in the field.

If funding is requested for a lab, other public access technology facility, of other physical facility:  
a. How many hours per week the lab will be open:  
N/A  
b. Who will supervise the facility and how will that be funded ongoing:  
   
c. What physical space will be used to host the facility, and who has authorized its use:  
   
d. If any renovations or furnishings will be required to support the project, how will they be funded?  
   
Please describe how many students will be served each term through the funding of this project, and through what means:  
Approximately 50 to 60 students register for field schools both at home and abroad in the summer and winter intersession terms. If the project is funded, the equipment will serve all of them. Fieldwork and aerial photos form the basic documentation of their individual project portfolios.

How will projected outcomes be assessed?
Students present an oral and written report on the season's fieldwork. The use of photodocumentation will be part of the grade assessment.
Description of Proposed Project:
The Department of Earth and Environmental Sciences has 24 laptops that are heavily used for many classes, including for field trips. These laptop computers were purchased in 2009 and are constantly/heavily being used by the following classes:
EESC.1201 Intro Environmental Science/ Branco, Brett and Cherrier, Jennifer
EESC.2300 Structural Geol & Field Analysis/ Flores, Kennet
EESC 3600 Hydrology of Water Resources
EESC.3610 Coastal Marine Science/ Cherrier, Jennifer
EESC 3850 Field Mapping in Death Valley/Garb, Matthew
EESC.3800 Statistics & Data Analysis in Geoscience/Smith, Brianne
EESC.3750 Intro to GIS/Boger, Rebecca
EESC 1010 The Dynamic Earth
EESC 7771G Geostatistics
EESC 7521G Lab and Field Techniques Using Geospatial Technologies
EESC 7500G Principles of Urban Water Dynamics
EESC 7470G Groundwater Hydrogeology
EESC 7151G Presenting Research in the Earth and Environmental Sciences
EESC 7155X Professional Portfolios for Earth and Environmental Scientists

Our laptop computers are reaching their last breath. Most of them are not working and we have problems with the batteries that are not recharging anymore (some of them recharge for 10 minutes of use). ITS has been a great help in trying to keep up, but it’s getting harder and harder. These laptops need to be replaced. We have discussed with ITS, and was suggested to submit this student tech fee proposal to replace these laptops.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
A large number of our classes for our majors in the department use these laptops for class projects. Without them, the syllabus for these courses will have to be significantly revised and student learning outcomes will be compromised. The objective of this project is to replace these old laptops and make sure that all the classes can continue to be able to run.

Some of the labs for our core classes (EESC 1010) also rely on these laptop computers to run.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a. How many hours per week the lab will be open:
   always

b. Who will supervise the facility and how will that be funded ongoing:
Chief CLT Guillermo Rocha will be the curator of these laptop computers, as he has been doing now. He will
work with ITS to install the required software and troubleshoot any problems that arise.

c.  **What physical space will be used to host the facility, and who has authorized its use:**

We have the secure cart to store these laptops, as is being done now for the old laptops.

d.  **If any renovations or furnishings will be required to support the project, how will they be funded?**

No renovation is needed.

**Please describe how many students will be served each term through the funding of this project, and through what means:**

We have about 80 students in our undergraduate major and 50 students in our Master's Program. These students will be the main ones benefit from this project. Although the number is relatively small, but it is crucial to be able to run the classes. Especially for field trips where students need to be able to collect the data in the field, making maps and performing data processing in the field - these laptops are non-dispensable. Otherwise my department won't function as an academic program.

**How will projected outcomes be assessed?**

The use of these laptops will be kept track of by the number of courses, instructors, students, and the number of times and the length of time they are checked out.

The number of students who uses each of the software installed (e.g., GIS, MS Office, Modflow ...) and how the computers are used (for classroom learning & exercises, group projects, field data collection, etc.) will be recorded.

The number of students enrolled in classes that use these laptops will be assessed.
Description of Proposed Project:
Exercise Stress Testing System including 12 lead EKG monitoring system, software and treadmill.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
The main objective is to provide students with an appropriate Exercise Testing System. In some classes this system will be used to explore the physiological responses to various types of exercise in order to gain a strong theoretical background in Exercise Science, in others the same system will be invaluable in training students in the practical aspects of Exercise Testing. Currently the Exercise Physiology Teaching Laboratory has no Exercise Testing System. Many of our graduates work in Stress Testing and Cardiac Rehabilitation. With a modern system of the type widely used in the field students will be able to get practical experience that will prepare them for the workplace. It will also increase our ability to provide quality basic science laboratory exercises for many classes.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a.   How many hours per week the lab will be open:

b.   Who will supervise the facility and how will that be funded ongoing:

c.   What physical space will be used to host the facility, and who has authorized its use:

d.   If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
The system will be used in the following classes: Physiology of Exercise, Advanced Physiology of Exercise, Cardiopulmonary Rehabilitation, Electrocardiography, Fitness Assessment and Exercise Prescription and Internship. Approximately 240 students will benefit from the system each year.

How will projected outcomes be assessed?
We intend to track the passing rate of our students on the internationally recognized standard of excellence for our field - the American College of Sports Medicine's Certification and Registry examinations.
Description of Proposed Project:

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
IT WILL PROVIDE A SIGNIFICANT IMPROVEMENT IN THE TEACHING/LEARNING ENVIRONMENT FOR A LARGE NUMBER OF STUDENTS. AT PRESENT, APPROXIMATELY HALF OF THE CLASS STRUGGLES TO SEE WHAT IS BEING PROJECTED ONTO THE SCREEN AT THE FRONT OF THE CLASSROOM, AND STRUGGLE TO HEAR WHAT IS BEING SAID BECAUSE OF THE AMBIENT NOISE IN THE ROOM, RELATING TO THE EQUIPMENT. OUR STUDENTS FIND STATISTICS CLASSES CHALLENGING, AND THE REMOVAL OF THESE IMPEDIMENTS TO COURSE DELIVERY WILL HAVE A VERY POSITIVE IMPACT.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
20
b. Who will supervise the facility and how will that be funded ongoing:
PSYCHOLOGY DEPARTMENT
c. What physical space will be used to host the facility, and who has authorized its use:
5201J IS THE PSYCHOLOGY DEPARTMENT STATISTICS LAB AND IS USED FOR PSYCHOLOGY DEPARTMENT STATISTICS LABS
d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
APPROXIMATELY 400 STUDENTS PER SEMESTER RECEIVE INSTRUCTION (LECTURES AND/OR LABS) IN THIS COMPUTER LAB. THEY WILL BE ABLE TO BETTER SEE WHAT THE INSTRUCTOR IS PROJECTING, FROM POWERPOINT SLIDES TO SOFTWARE DEMONSTRATIONS, THEY WILL BE ABLE TO MORE FULLY PARTICIPATE IN THE CLASS.

How will projected outcomes be assessed?
TO PROVIDE AN ADEQUATE TEACHING FACILITY FOR A REQUIRED COMPONENT OF THE MAJOR
IN PSYCHOLOGY, ONE THAT STUDENTS FIND PARTICULARLY CHALLENGING. OUTCOMES ASSESSMENT IN QUANTITATIVE REASONING IS PART OF OUR LARGER OUTCOMES ASSESSMENT PLAN
Information Technology for the General Chemistry Laboratory: Automated Data Acquisition

Description of Proposed Project:
ABSTRACT: Information technology has revolutionized the practice of experimental chemistry, and nearly all modern laboratory instruments interface with computers, and the collection of data is often automated. We propose to introduce laboratory Data Acquisition (DAQ) units, and their affiliated hardware, to the general chemistry sequence at Brooklyn College. This will allow the introduction of two new laboratory experiments designed to demonstrate the practice of modern chemistry. Students will learn to acquire data via automated sampling, and to use software to analyze that data. A further benefit is that the analysis is very similar to that presented in the lecture textbook, making it possible to draw a closer connection between theory and experiment. The experiments represent significant improvements on the experiments they replace.

OVERVIEW: Over the last 7 years, the department has replaced 16 of 20 experiments in first-year chemistry, with the goal of ensuring students acquire skills relevant to the 21st century. The department has obtained and modified two technology-intensive experiments for inclusion in Chemistry 2100. The experiments are implemented using hardware sold by Vernier, Inc. The department has already acquired and tested the equipment, and confirmed that the units are cost-effective, sufficiently accurate, and reliable for teaching purposes.

Over 500 students register for Chemistry 2100 every year. Funds are requested to allow implementation of the new experiments across all sections, with students working in pairs. The department anticipates a future request to the Technology Fee program for additional equipment, so that students will be able to work independently, each with their own instrument. Once that is complete, there should be no further Technology Fee requests for this purpose. The department is phasing out some existing "dumb" equipment currently in use and will apply the savings to maintain its stock of Vernier equipment. Funds requested from the Technology Fee therefore represent capital costs, with ongoing expenses assumed by the department.

EXPERIMENTS:
The kinetics experiment relies on the automated collection of data to measure the concentration of dye as a function of time. The process is too rapid to be accurately measured manually, but automated data collection permits generation of a smooth kinetic curve that can be analyzed mathematically to determine the rate constant. Students will generate the data, transfer it to USB flash drive, and take it home to perform the analysis. Students thus engage in data analysis that closely resembles that presented in the course textbook and is in current use in research laboratories. The experiment replaces an antiquated experiment involving a stopwatch that requires less relevant data analysis.

The equilibrium experiment exploits the DAQ unit's ability to perform simultaneous measurements on different chemical species in solution. Students will study the deprotonation of a weak acid using spectrophotometry to determine the concentration of a molecular acid and its conjugate base, and a pH meter to electrochemically determine the concentration of hydrogen ion in solution. Concentrations of each species will be varied to explore the equilibrium response of the system. The experiment replaces an approach based on indirect optical measurements that requires highly abstract data analysis of little relevance to modern chemical practice.

IMPLEMENTATION:
Both experiments have been extensively tested using Vernier equipment purchased by the department. Full-scale implementation can begin as soon as equipment is received. Laboratory utilization for Chemistry 2100 is high, with as many as three sections run simultaneously. Funds are requested for enough instrumentation to support 3 concurrent sections of 24 students each (with students working in pairs), with a pool of 9 additional sets to serve as backups. In addition to Vernier equipment, funds are
requested for the purchase of 1 laptop per section to allow the instructor to make a copy of student data and demonstrate simple analysis in the laboratory. The department will pay the ongoing expenses for the Vernier gear by phasing out its fleet of Spec 20 UV/Visible spectrophotometers, and redirecting that maintenance budget. This necessitates the purchase of a small quantity of additional Vernier equipment to meet the needs for spectrophotometry in Chemistry 1100. This proposal requests funds for 12 spectrophotometers and associated DAQ units for that purpose. With over 600 students/year completing the Chem 1100 laboratory experiments, this is a justifiable expense.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
The proposed new experiments encompass all current Learning Objectives with respect to kinetics and equilibrium in general chemistry. The department anticipates that these objectives will be more effectively met, as the new procedures allow a closer connection between the lecture textbook and the necessary data analysis for the laboratory.

Additionally, the department seeks to offer students experience in automated data collection, and the manipulation and analysis of such datasets. These experiments meet those objectives.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:

On average, roughly 250 students take Chemistry 2100 each semester during the academic year, with an additional 90 pursuing the course during the summer. All of these students will directly benefit from participating in the new experiments.

How will projected outcomes be assessed?
As with any other experiment, students must write laboratory reports detailing their outcomes. During the first year, laboratory instructors will report the results of these experiments to lecture instructors, for comparison with historical results for the experiments that have been replaced. Comparison will indicate whether the new experiments have improved student mastery of these topics, providing a basis for assessment of the merit of the new experiments.

If students are found to be struggling with particular topics, the experiments and their supporting materials will be modified to improve student understanding.
Teaching tools for large lecture halls

Description of Proposed Project:

a) Funds for 4 portable wireless microphones systems for instructors to use in large lecture halls. The wireless microphone system has one receiver, one transmitter, and one lavalier microphone per classroom. An extra lavalier microphone will be kept on standby for each classroom. The AV integrator in the ITS department at Brooklyn College was consulted to determine the system that would be most compatible with existing audio-visual equipment in the lecture halls.

b) Funds for 60 response cards (clickers). Clickers are interactive polling software that can be incorporated into lectures, and are a proven method to actively assess student understating of course material. Clickers serve especially well in large lectures because it enables effective feedback from the class for topics that were collectively hard to comprehend. A previous request for 120 clickers was recently funded by the STF, but due to increases in class strength, more clickers are needed in each class to make sure all students have an opportunity to respond to questions posed in class.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The objective of this project is to make an effective learning environment in large lecture halls.

A wireless microphone system will allow the instructor to deliver an enthusiastic lecture, and engage students from all corners of the classroom. More importantly, this system will allow students to follow the lecture clearly, and minimize miscommunication. Existing systems restrict the instructor to the front of the class, which is not ideal for large lecture halls as it is difficult for the students to hear the lecture.

Clickers serve especially well in large lectures because it enables effective feedback from the class for topics that were collectively hard to comprehend. Due to increases in class strength, more clickers are needed in each class to make sure all students have an opportunity to respond to questions posed in class.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
The equipment will greatly benefit a large number of students. The approximate student enrollment in courses
with large sections in the Psychology Department (per semester) is as follows:
Statistical Methods in Psychological Research (PSYC 3400): 480
Introduction to Psychology (PSYC 1000): 700
Abnormal Psychology (PSYC 2810) : 380
Social Psychology (PSYC 2100) : 280
Experimental Psychology (PSYC 3450W) : 260
Mind, Brain, and Behavior (PSYC 2600) : 200

How will projected outcomes be assessed?
The wireless microphone system will ensure that the instructor is audible throughout the lecture, and will allow
the instructor to provide individual attention to students, as needed, from anywhere in the classroom. The
effectiveness of the equipment will be ascertained from students? participation in the class. The clickers provide
instant feedback on students? level of comprehension allowing the instructor to adjust the lecture appropriately
based on this feedback.
Software Request Form (revised 10/2015)
Request may not exceed 3 single spaced pages of 11-point type. Longer requests or smaller point type will not be considered.

Please submit the completed form electronically to STFREQUEST@brooklyn.cuny.edu. For questions, contact Anil Lilly of ITS at x5861 Deadline: 12/11/2015.

Please note that this form is required only for a proposal/request to purchase software that will be used for instructional purposes – not for research or personal use by faculty or staff. A committee of faculty and public lab managers reviews these requests to gauge:

• The true campus cost both initially and ongoing, and whether that cost is justified by the proposed use within a limited budget for software licensing.
• Whether the proposed functionality is available in other existing campus software tools
• Whether the products are technically compatible with college systems and infrastructure

1. Department/Office Name: Psychology

2. Primary Applicant Name: Professor Anjali Krishnan
Secondary Applicant Names:
Professor Laura Rabin, Professor Aaron Kozbelt, Professor Curtis Hardin, Professor Matthew Crump, Professor Rona Miles, Professor Cheryl Carmichael, Professor Hanah Chapman

3. Primary Contact for Request(s): Professor Anjali Krishnan
   Email: anjali.krishnan05@brooklyn.cuny.edu

4. Has this proposal been approved by the appropriate Dean, Chair or Area Head? Yes

5. Description of proposed expenditure/project: Equipment for use in large lecture halls with 110-180 students:

   a. Funds for 4 portable wireless microphones systems for instructors to use in large lecture halls. A wireless microphone system will allow the instructor to deliver an enthusiastic lecture, and engage students from all corners of the classroom. More importantly, this system will allow students to follow the lecture clearly, and minimize miscommunication. Existing systems restrict the instructor to the front of the class, which is not ideal for large lecture halls as it is difficult for the students to hear the lecture. The wireless microphone system has one receiver, one transmitter, and one lavaliar microphone per classroom. An extra lavaliar microphone will be kept on standby for each classroom. The AV integrator in the ITS department at Brooklyn College was consulted to determine the system that would be most compatible with existing audio-visual equipment in the lecture halls.

   b. Funds for 60 response cards (clickers). Clickers are interactive polling software that can be incorporated into lectures, and are a proven method to actively assess student understating of course material. Clickers serve especially well in large lectures because it enables effective feedback from the class for topics that were collectively hard to comprehend. A previous request for 120 clickers was recently funded by the STF, but due to increases in class strength, more clickers are needed in each class to make sure all students have an opportunity to respond to questions posed in class.

6. Estimated total cost (see attached quotes):
   4 Wireless microphone systems (including a receiver, transmitter, and two lavaliar microphones) = $3786.72.
   60 Response Card RF with LCD box = $1920.00.
   Total estimated costs = $5706.72
7. Would you like to: Retire software? Introduce new software? Upgrade existing software?
   Retire _____        Introduce __X__        Upgrade _____

8. Will faculty need training on the new software? No

9. Will software be used for specific courses? Which courses?
   Both the wireless microphone system and clickers will be used in multiple courses with large lecture sections in the Psychology Department including (but not limited to) Statistical Methods in Psychological Research (PSYC 3400), Introduction to Psychology (PSYC 1000) Abnormal Psychology (PSYC 2810), Social Psychology (PSYC 2100), Experimental Psychology (PSYC 3450W) and Mind, Brain, & Behavior (PSYC 2600).

10. How many sections will be offered?
    Large sections of these courses are offered at least once a semester, more specifically we offer 8-10 large lecture sections a semester. The sections have 110-180 students, and are held in multiple lecture halls on the Brooklyn College campus such as rooms in Ingersoll Extension, Ingersoll Hall, Whitehead, and Boylan Hall.

11. How many students will be using the software each term?
    The equipment will greatly benefit a large number of students. The approximate student enrollment in each of the courses listed above (per semester) is as follows:

    Statistical Methods in Psychological Research (PSYC 3400) : 480
    Introduction to Psychology (PSYC 1000) : 700
    Abnormal Psychology (PSYC 2810) : 380
    Social Psychology (PSYC 2100) : 280
    Experimental Psychology (PSYC 3450W) : 260
    Mind, Brain, and Behavior (PSYC 2600) : 200

12. Does the college have a similar software tool already? If so, why is this new tool needed?
    Clickers are used in Experimental Psychology (PSYC 3450W) and were funded by STF three years ago. Additional clickers were funded by the STF for Statistical Methods in Psychological Research (PSYC 3400) last year for a class of 120 students, but now the class size has increased to around 180 students, along with an increase number of sections the department offers. Therefore, this proposal accommodates clickers for the additional students (i.e., 60 more clickers). The lecture halls have a stationary microphone system, which restricts the instructor to only the front of the class, which is not ideal for large lecture halls as it is difficult for the students to hear the lecture. Wireless microphone systems have not been obtained previously, and based on the number of large classes, they will be used very frequently on a daily basis.

13. How will the new software effectiveness be assessed?
    The wireless microphone system will ensure that the instructor is audible throughout the lecture, and will allow the instructor to provide individual attention to students, as needed, from anywhere in the classroom. The effectiveness of the equipment will be ascertained from students’ participation in the class. The clickers provide instant feedback on students’ level of comprehension allowing the instructor to adjust the lecture appropriately based on this feedback.

This document was completed by Professor Anjali Krishnan, and has been approved by Professor R. Glen Hass, Chair of the Psychology Department at Brooklyn College of the City University of New York.

Anjali Krishnan, Ph.D.
Assistant Professor

R. Glen Hass, Ph.D.
Professor & Chair

Date: December 10th, 2015

Date: 12-10-15
Sold To:  Julie  
Brooklyn College  
2900 Bedford Ave  
Box 711  
Attn: Accounts Payable  
BROOKLYN, NY 11210

Bill Phone:  (718)951-5664  
Work Phone:  (718)951-5421  Ext.: A/P  
Fax Phone:  (718)951-5423

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|           |               |       |             |          | (WL185)  |        |          |
| 4         | SHURE SLX-1 BODY PACK TRANSMITTER (H5)/REG  
Free Standard Shipping in the Contiguous (lower-48) USA. | 195.02 | 780.08    |
|           |               |       |             |          | SHSLX1H5  | (SLX1H5) |        |          |
| 4         | SHURE WL185 CARDIOID LAVALIER MIC/REG  
Free Standard Shipping in the Contiguous (lower-48) USA. |       |             |          |        |          |        |
PLEASE NOTE: ------------------------------------------------------------------
***********UPCOMING SCHEDULE CHANGE ************
B&H SuperStore will be closed on Friday December 25th
We will reopen Sunday December 27th at 10AM
********************************************************************************
We will be open on New Year’s Day
Friday January 1st from 9AM-1PM
Certain items may be enforced by vendor to sell at the 
vendor-imposed price posted at the time of order.

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Payment Type - NO PAYMENT TYPE SELECTED

- Amount

Sub-Total: 3,786.72
Shipping: Free STND

Total: 3,786.72
Price Quote

Prepared for: Anjali Krishnan
CUNY Brooklyn College
(718) 951-5000
Anjali.krishnan05@brooklyn.cuny.edu

Prepared by: Cassie Powell
--For—
Gregory Thomas
Account Executive
(330) 531-7677
gthomas@turningtechnologies.com

CUNY Brooklyn College

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TOTAL: $1,920.00

SPECIAL INSTRUCTIONS: Please see notes below.

Please let me know if you have any questions.

To place any order:
- If by credit card, I can take the order via phone at 330-531-7729
- If by purchase order, either email a copy to cpowell@turningtechnologies.com or fax to 330-884-6065 at my attention.

Thank you,
Cassie

NOTES:
1. The price quoted excludes applicable sales taxes. The actual invoiced price will include all applicable taxes required to be collected by Turning Technologies, LLC.

2. Pricing does not include Shipping and Handling (S&H). S&H costs are based on number of systems purchased and selected delivery method. S&H will be added in at the time of purchase. Systems are shipped via UPS Ground unless otherwise specified.

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Student Technology Fee Proposal #2016-87
Tablet-based research and documentation stations for the Microbiology lab

School: School of Natural and Behavioral Sciences
Department/Office: Biology
Applicant Name: Muth, Theodore

Description of Proposed Project:
We are requesting funds to purchase 24 iPads or tablets, sealed in secure, protective casing and mounted on articulating arm brackets, for the undergraduate microbiology laboratory (BIOL 3004). Students work in the lab with numerous different bacteria, fungi and bacteriophage, as well as environmental samples containing communities of microorganisms whose exact composition is unknown. Because of the nature of work with these living microorganisms, our safety guidelines prohibit students from using any electronic devices in class (including phones, laptops, tablets, etc.), to make sure that they do not accidentally contaminate their devices and take microorganisms out of the lab. Students in the microbiology lab also uses a number of dyes and other chemical reagents that could damage their electronic devices if there were a spill or splash. For these reasons, the lab is currently only able to use a laptop computer and projector seated on a rolling cart that is operated by the lab instructor when needed for presentations in the lab. The interactive tablet stations will provide access to technological resources that students are not able to access with their own devices. The LifeProof cases will protect the tablets from splashes and spills, and can be cleaned regularly to remove any microorganisms that they may have become contaminated with during the lab. The articulating mounting arm will keep the tablets off the bench surface and out of the students' working space, but in easy view. The tablets and mountings are secure and cannot be removed without a key, thereby reducing the risk of theft.

Budget description:
There are numerous options for tablets, protective cases, and mounting arms. For the purpose of estimating the total budget request, we chose items that met all our requirements and used the current pricing.
1. iPad Air (Apple education store, $370.00)
2. LifeProof Case for iPad ($82.49)
3. Dyconn Nimble articulating arm ($99.99)
We are requesting 24 of each of these items for a total cost of $13,476.
If this STF proposal is funded we will check to see if better, or less expensive, products have become available that would meet the same criteria.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
The Department of Biology's microbiology labs (located in Ingersoll Hall, rooms 3217 and 3233) have not changed significantly since they were built several decades ago. The laboratories were designed for undergraduate microbiology lab experiments that did not rely heavily on technology or access to computer and Internet applications. The safety precautions needed in these labs, where living microorganisms and chemical reagents are used in each lab session, prohibit students from using their own electronic devices to access class materials, on-line resources, digital documentation applications, and data analysis software. The interactive tablet research and documentation stations will provide easy and safe access to resources that they can only access now outside of the scheduled lab time, or during instructor-lead presentations from a single computer and projector. The following list describes several of the ways in which these interactive stations will impact students in the microbiology lab:

1. Digital lab manual: the students are required to bring a printed lab manual to each lab session. This lab manual contains detailed description of each laboratory project, protocols, safety guidelines, background information, and critical thinking questions. The tablet stations will be loaded with electronic versions of the lab manual. This will make it easier to update and make changes to the lab manual during the semester and students will not need to worry about contamination. Currently, if a printed lab manual is contaminated it cannot leave the lab and is destroyed and the student needs to print out a new manual.
2. Microbe Library: The American Society for Microbiology curates the Microbe Library (http://www.microbelibrary.org/) that is a resource for images, videos and protocols relating to a wide range of microorganisms. Using the interactive stations, students will be able to access the Microbe Library site during class to help them with in class assignments and as a general reference resource.

3. MicrobeWiki: The MicrobeWiki site (https://microbewiki.kenyon.edu/index.php/MicrobeWiki) is a great resource for undergraduate students. The student lab manual contains numerous links to the MicrobeWiki site and students use the site frequently when preparing for class. Using the iPad stations, students will be able to access the MicrobeWiki site during class to help them with in class assignments and as a general reference resource.

4. Photographic documentation: The tablets have built in cameras that will allow students to photograph the data they collect in lab, such as bacterial colonies growing on agar plates and colorimetric fermentation reaction tubes. Students can send their images from the tablet to a Dropbox folder or e-mail account and conveniently have their data outside of the lab without any risk of carrying microorganisms out of the lab. Currently students are not allowed to take any of their plates or tubes containing bacteria out of the lab. The ability to keep a photographic record of their results will be a great help to students as they study and prepare for quizzes and exams outside of the lab.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

35

b. Who will supervise the facility and how will that be funded ongoing:

Dr. Muth is the course director for microbiology and supervises the microbiology lab along with the two Biology CLTs (Judy Wright and Roland Hosein). The supervision of the lab is already a part of their work and the addition of the interactive tables stations will not require any additional costs relating to supervision.

c. What physical space will be used to host the facility, and who has authorized its use:

The microbiology labs are located in 3217 and 3223. This space has been the authorized microbiology lab space for several decades.

d. If any renovations or furnishings will be required to support the project, how will they be funded?

None.

Please describe how many students will be served each term through the funding of this project, and through what means:

The Microbiology Laboratory (BIOL 3004) is a required course for the Biology major. Each semester there are 10 lab sections and each section typically enrolls between 18 and 20 students. That is ~200 students per semester and ~400 students per year.

As mentioned above, for safety reasons students in the Microbiology Lab are not able to access computers or other electronic devices in the lab. The tablet stations will provide students with important resources and analysis tools for their work and will allow them to learn much more from their experiments in the microbiology lab. Our objectives for an enriched student learning experience in the lab are as follows:

Students will have an improved experience in the lab as a result of being able to access microbiological resources (ASM Microbe Library for example) and class materials easily without the limitation they currently face.

Students will be able to collect visual data from their work using the camera in the tablet and transport this important information out of the lab. These data can be included in their lab reports and also be used in end of the semester presentations.

Over the past four years the microbiology lab has introduced an authentic student research module that examines the complex microbial communities from the urban environment around campus. The students use swabs to collect bacterial samples from streets, sidewalks, subways platforms and other urban sites and then extract the total genomic DNA from these microbial communities (the community "metagenome"). The DNA is sent out for next generation sequencing at a commercial lab and the students receive back sequence data for tens of millions of DNA bases representing the diverse communities of several hundred or more individual bacterial species. Using these data the students can determine the different types of bacteria present in their samples and also the
relative abundance of each of these bacteria. There are a number of excellent, free, on-line tools for working with these large amounts of DNA sequence data, however, it has been difficult to have students use these resources because there is no convenient way for them to get the tutorials in lab that would give them enough training to work with their data on their own outside of lab. At the present, the students have only used Excel to analyze their DNA data, and even in that case, many students come into the lab with no experience using Excel. The following list describes several of the DNA analysis tools that could be used in the lab with the tablet stations:

1. Integrated Microbial Genomes and Metagenomes (IMG): (http://img.jgi.doe.gov/). The IMG site hosts the genome sequence data of thousands of microbial genomes (and metagenomes) with well curated annotations for many of the genes present in the genomes. There are tools to compare sequence and function across gene families and whole genomes. The IMG site is an excellent resource for discovery and analysis of genomic data.

2. National Center for Biotechnology Information (NCBI): The NCBI is an excellent resource for information on microbial gene sequences and microbial genomes. The NCBI site hosts the Basic Local Alignment Search Tool (BLAST) resource that will allow students to analyze and compare DNA sequences from their research results to sequences that have been submitted to Genbank during the lab.

3. Quantitative Insights Into Microbial Ecology (QIIME): The QIIME analysis pipeline is a powerful tool for filtering and clustering raw DNA sequence data. The data tables produced by the QIIME pipeline can be used by students to examine the α- and β-diversity within their microbial samples.

4. ClustalW: The ClustalW tool allows students to upload DNA sequences data from their data and do multiple sequence alignments and generate phylogenetic trees.

Students will be able get the training from their instructors in the lab on how to analyze their urban microbial community DNA sequence data in much greater depth than previously possible by using the tablet stations. Students will have an experience working with big data and see the importance of computer applications to analyze large DNA sequence data sets. This exposure will help build the each student's ability to work with quantitative data and provide a basic introduction to statistics (student's T-test, ANOVA and Simpson's Diversity Index) commonly used in bioinformatic analysis of data.

**How will projected outcomes be assessed?**

We expect to see improvements in learning and understanding across all areas of the microbiology curriculum because of the enhanced experience the students will have with access to the tablet stations. We will use quizzes and exams to test students on their ability to analyze and interpret the DNA sequence data that is similar to the data they collected during the course of the lab. We will use the validated CURE (Classroom Undergraduate Research Experience; http://www.grinnell.edu/academics/areas/psychology/assessments/cure-survey) and SALG (Student Assessment of Learning Gains) instruments to measure student outcomes.
Student Technology Fee Proposal #2016-74
Promoting Technology based Experiments in General Physics II Laboratory

School: School of Natural and Behavioral Sciences
Department/Office: Physics
Applicant Name: Nakarmi, Mim Lal
Additional Applicant(s):
Primary Contact for Proposal
   Email Address: MLNAKARMI@BROOKLYN.CUNY.EDU
   Phone: 718-951-2867
Estimated total cost: $ 63,500.00

Description of Proposed Project:
Department of physics at Brooklyn College offers two general physics courses, each with its own algebra-based (Phys 1100 & Phys 2100) and calculus-based (Phys 1150 & Phys 2150) versions. Calculus-based versions are for physics and engineering students whereas algebra-based versions are mainly for natural science and other interested students. A three-hour laboratory is a compulsory part of each of these courses. Laboratory experiments are similar in both algebra-based and calculus based general physics. In recent years, we have seen a steady increase in students signing up for general physics classes and consequently we’ve had to open new sections in general physics classes. The total number of student in our general physics classes is about 800 each year. Due to the increase in student enrollment, the maximum number of students allowed in each laboratory section of general physics has also been increased from 18 to 24. These laboratory classes were originally designed for 18 students. The apparatus currently available for these laboratory experiments are actually not sufficient for 24 students. However we have no option than putting more than the ideal number of students in each group in those labs. Additionally, the apparatus have not been upgraded for more than a decade. For various reasons including the insufficient and quality of our apparatus, we get lots of complaints from students regarding general physics labs.

Last summer, we did an inventory of the apparatus in the general physics laboratories and listed apparatus needed to prepare 12 full sets of experimental station. We found that some apparatus are obsolete, for some apparatus replacement parts are not available and some are available only in newer models. We believe it is time to upgrade our general physics laboratory promoting technology based experiments. There are several technology based physics apparatus for general physics labs developed from different companies such as Vernier Software & Technology and Pasco Scientific. These apparatus use digital or analog sensors that can be accessed from computer through an interface device. We have used some of them in activities and laboratory of general physics classes offered in Student Centered Active Learning Environment (SCALE-UP). Students’ responses in SCALE-UP classes were very positive. We also found that conceptual understanding of the students in SCALE-UP is better than that in conventional classes. This is one of the reasons we would like to promote technology based experiments in general physics laboratory taught in conventional mode.

Last year, we received about $50 K to promote general physics I laboratory from the Student Tech Fee proposal. Ordering the required apparatus is on the way and testing and installation of the new apparatus will take place in Spring and Summer 2016 semesters. The aim of this proposal is to acquire apparatus required to enhance general physics II laboratory.

I have been heavily involved in developing materials for technology based activities, and laboratory in general physics classes offered in SCALE-UP mode. I designed, tested and prepared instructional manuals for the labs. I am also leading this project for modifying the labs in conventional labs. We have listed required apparatus and their estimated cost for Physics in the following tables. Estimated cost is $63K based on the price listed in the websites. The list of the apparatus with estimated priced is attached. Most of these apparatus are not consumable. Thus, it is a onetime investment that lasts for several years. If funded, we plan to work on designing, testing and modifying manual in summer break. We chose computer interface devices are from Vernier since we have used them and are more familiar with. They are also relatively cheaper and provide good customer service.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?

Students enrolled in the general physics spend 3 hours in a lab every week out of 7 contact hours in these courses. Students actually learn concepts of physics when they have hands-on laboratory experience of the physics principles discussed in the lecture. We have witnessed that technology based laboratory enhance conceptual understanding of physics. Thus, it is expected that this project will have significant impact on students?
conceptual learning of physics which will be their important asset that can be implement in their whole life. For example, chances of getting higher scores in MCAT can be expected with better conceptual understanding for premed student. Physics majors and Engineering students will have solid foundation with more conceptual understanding of Physics principles.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. **How many hours per week the lab will be open:**
   
   21

b. **Who will supervise the facility and how will that be funded ongoing:**
   
   Physics CLT, Alexander Sapozhnikov will supervise the lab. He is a full time chief CLT in physics department.

c. **What physical space will be used to host the facility, and who has authorized its use:**
   
   Spaces used will be Physics labs room 4420N and 4439N. All students, physics instructors and CLT have authority to use them while teaching.

d. **If any renovations or furnishings will be required to support the project, how will they be funded?**
   
   No renovation needed.

Please describe how many students will be served each term through the funding of this project, and through what means:

This project will serve ~ 400 students every year in the current enrollment situation. It is likely that the number will increase based on the current trend. Out of them about 40 students will be physics and engineering majors. Majority of the rest will be students in science majors including premed students. Since the project will improve laboratory apparatus in general physics labs, once the project is completed it will serve through the laboratory teaching to all students enrolled in general physics II labs for many years to come.

How will projected outcomes be assessed?

Assessment of the student's outcomes will be made from both qualitative and quantitative measures of learning outcomes via questionnaires and short tests. Standard "Conceptual Survey on Electricity and Magnetism (CSEM)" will be used as a tool to assess. It is a standard assessment tests developed by Physics Education Research to assess conceptual understanding in general physics. Pre-tests will be administered to all students before the first lab and post-test will be given in the last lab of the semester. Gain will be calculated based on the improvement during the semester. Qualitative measure will be obtained via feedback from students at the end of semester. Feedback from instructors will also be collected from instructors for qualitative assessment.
# 1. List of apparatus requested for physics II

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**Total** $63,490
Student Technology Fee Proposal #2016-100

Overhead Projection for food lab

School: School of Natural and Behavioral Sciences
Department/Office: Health and Nutrition Sciences
Applicant Name: Nazario, AnaRosa

Description of Proposed Project:
The funding will be used to upgrade the food lab in 111 Roosevelt to a smart classroom.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
This project will directly benefit and enhance student learning by incorporating visual aides during cooking demonstrations. It will be useful for the international cooking classes by introducing the students to proper cooking techniques and diversity of ingredients used around the world; sometimes difficult to acquire in our neighborhood groceries.
It will also be beneficial for the students, as well as the instructor, to troubleshoot cooking ideas and recipes. In our food science classes it would teach students on chemical make up of food and processes of digestion, decomposition, and reactions.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a. How many hours per week the lab will be open:
30+
b. Who will supervise the facility and how will that be funded ongoing:
Collectively, the Health and Nutrition Science Department will be supervising this room, the instructors assigned to teach at this location during the semester and lastly the departments lab technician.
c. What physical space will be used to host the facility, and who has authorized its use:
The food lab in 111 Roosevelt.
d. If any renovations or furnishings will be required to support the project, how will they be funded?
N/A

Please describe how many students will be served each term through the funding of this project, and through what means:
Approximately 100 to 120 students would benefit from the addition of this technology. This number is estimated from each semesters enrollment into the food science and food of diverse populations labs as well as the Health and Nutrition club, which with the help of our instructors , use this room for various cooking demonstrations throughout each semester.

How will projected outcomes be assessed?
N/A

School: School of Natural and Behavioral Sciences
Department/Office: Health and Nutrition Sciences
Applicant Name: Nazario, AnaRosa

Description of Proposed Project:
The funding will be used to upgrade the food lab in 111 Roosevelt to a smart classroom.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
This project will directly benefit and enhance student learning by incorporating visual aides during cooking demonstrations. It will be useful for the international cooking classes by introducing the students to proper cooking techniques and diversity of ingredients used around the world; sometimes difficult to acquire in our neighborhood groceries.
It will also be beneficial for the students, as well as the instructor, to troubleshoot cooking ideas and recipes. In our food science classes it would teach students on chemical make up of food and processes of digestion, decomposition, and reactions.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a. How many hours per week the lab will be open:
30+
b. Who will supervise the facility and how will that be funded ongoing:
Collectively, the Health and Nutrition Science Department will be supervising this room, the instructors assigned to teach at this location during the semester and lastly the departments lab technician.
c. What physical space will be used to host the facility, and who has authorized its use:
The food lab in 111 Roosevelt.
d. If any renovations or furnishings will be required to support the project, how will they be funded?
N/A

Please describe how many students will be served each term through the funding of this project, and through what means:
Approximately 100 to 120 students would benefit from the addition of this technology. This number is estimated from each semesters enrollment into the food science and food of diverse populations labs as well as the Health and Nutrition club, which with the help of our instructors , use this room for various cooking demonstrations throughout each semester.

How will projected outcomes be assessed?
N/A
Student Technology Fee Proposal #2016-73

in classroom genetics using dissecting microscopy with wifi camera

School: School of Natural and Behavioral Sciences
Department/Office: Biology
Applicant Name: Schvarzstein, Mara
Additional Applicant(s): Mara Schvarzstein
Primary Contact for Proposal
Email Address: mschvarzstein@brooklyn.cuny.edu
Phone: 7189515000 3582
Estimated total cost: $634.00

Description of Proposed Project:
I teach Genetics both in the class (Bio 3011) and in my laboratory to Bio 5000 research course undergraduates. Genetics is a lecture only class. Many of the genetics concepts we discuss are simple when learned hands on, but difficult to understand in lectures. I will incorporate genetic experiments in the lectures of Bio 3011. I will perform the experiments in class and follow their progress through the course of the semester. For these experiments I will use my own dissecting microscope outfitted with a wifi camera (see budget and attached quote) to allow students to see on the screen what I am doing.

We will perform genetic crosses with the nematode C. elegans which has a short reproductive cycle of 3 days from egg to egg. Specifically we will perform experiments to learn; 1. differences between recessive, dominant and semi-dominant mutations, 2. maternal contribution and inheritance, and 3. genetic complementation. Experiments will be performed on a Thursday and followed up on the following week Tuesday and Thursday classes.

For the first experiment we will cross three mutants to normal (wild type) animals to establish whether they are recessive, dominant or semi-dominant. This cross will yield progeny that look either; i. wild type and thus are recessive mutants, ii. mutant and thus are dominant mutations, iii. an intermediate between the mutant and the wild type nematodes and thus are semi-dominant mutations. This experiment will take about one week.

For the second experiment we will compare homozygous mutant progeny, which arose from either homozygous mutant mothers or from heterozygous mothers. Mothers that are heterozygous will contribute the wild type protein and/or mRNA affected in the the mutant to its mutant homozygous progeny and thus these progeny defects will be less severe if the progeny arose from a homozygous mutant mother. This experiment will also take a week.

In the last experiment (complementation test) we will cross 3 mutants to one another. Although the three mutant defects look identical only two of the mutants affect the same gene. Therefore, the progeny from these crosses will give mutant looking progeny only when the mutant parents have mutations in the same gene, whereas mutant parents with different genes affected will yield progeny that look like normal (wild type worms). This experiment will also take about a week to complete.

The dissecting microscope with the wifi camera will reside in my laboratory. This set up will be used, when not being used for the Bio 3011 class, to instruct Bio 5000 research course students in my laboratory in the husbandry, trait analysis, sexing, and crossing of nematodes. Either I or more senior students will use the camera to show on an ipad the procedures and nematodes being done under the dissecting microscope. Students will see the procedures as the instructor (i.e. me or the senior student) is working on the dissecting microscope with the nematodes.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
There is no laboratory component for the Genetics (Bio 3011) course. The hands on experience will help students understand the material rather than memorize the information provided in the lecture. I believe this camera will significantly improve their learning experience in addition to improve their understanding of several complex genetic concepts. The experiments will allow them to re discover the concept on their own, providing them with an additional opportunity to solve problems and think critically.

In my laboratory new students will be able to see the procedures being taught to them rather than imagining based on our explanation.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a. How many hours per week the lab will be open: 45

b. Who will supervise the facility and how will that be funded ongoing:
During the genetics lectures and in my laboratory I will perform or supervise the use of the camera. I will train students in the use of the camera attached to my dissecting microscope (already in house).

c. What physical space will be used to host the facility, and who has authorized its use:
no additional space will be required

d. If any renovations or furnishings will be required to support the project, how will they be funded? no

Please describe how many students will be served each term through the funding of this project, and through what means:
I currently have four bio 5000 research course undergraduates in my laboratory that will benefit from the use of the camera. I will be regularly taking undergrads in my laboratory for bio 5000 research courses.

In addition this camera will be used during lectures to perform genetic experiments in class. Genetics (Bio 3011) is offered every semester and regularly more than 100 students are registered in this class.

How will projected outcomes be assessed?
Students will be tested on the experiments that we do together during the course of the semester in our final exam. I have already specifically tested the students in this semester the concepts of recessive, dominant and semi-dominant mutations, maternal inheritance and genetic complementation. I will perform the experiments for these concepts in class and compare the performance of the students in the same test questions once we get the camera. In my laboratory the camera will help students learn how to handle the nematodes and do genetic crosses. So far i do this by describing what I do in the microscope and showing them the end result. The camera would allow them to visualize what is being done under the microscope as I am doing it. Regularly undergraduates take at least 2-3 days of hard work before they can handle nematodes and set up genetic crosses. I will asses how long new students take to learn to handle and cross nematodes while being taught with the help of the camera.
Bill To: BROOKLYN COLLEGE  
2900 BEDFORD AVENUE  
BROOKLYN, NY 11210

Ship To: BROOKLYN COLLEGE  
2900 BEDFORD AVENUE  
BROOKLYN, NY 11210  
ATTN: MARA SCHVARZSTEIN

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**Total Amt.:** $633.60  
**Paid Today:** $0.00

**Balance Due:** $633.60
Description of Proposed Project:
For the 2015-2016 academic year, the Technology Fee Committee awarded the Student Governments of Brooklyn College $31,250 to acquire CollegiateLink, a new online tool that will improve student services and support college-sponsored student activities. The funds were to support the tool for one year with an assessment being done at the conclusion of the year.

Unfortunately, the contract for CollegiateLink was not approved by CUNY, and a new vendor was secured. The contract for OrgSync was signed on August 25, 2015 in the amount of $17,500 for one full year plus on-site training.

OrgSync, rebranded as The Bulldog Connection, provides a platform for promoting student learning and growth through co-curricular opportunities while centralizing and organizing processes and procedures. The Bulldog Connection will streamline many campus activities processes and provide the following tools to manage student organizations:

- Customize an organization profile with content and graphics.
- Manage club rosters and fill positions with newly-recruited members.
- Send out e-mail or text messages (SMS) to specific officers, event attendees, or an entire organization membership list.
- Promote events through an online calendar that simultaneously includes all posted events on a campus-wide calendar.
- Hold secure online elections for open officer positions.
- Upload lists of students, send out invitations, monitor RSVP status, and track attendance using card-swipe or barcode readers.
- Approve service hours completed by organization members.
- Store electronic documents, photos, and other files and control who can access them.

With the delay in implementation of the tool due to contract negotiations, we are unable to complete one full year of training. The tool will go live at the end of the fall semester providing
us with only one semester of usage. Thus, we are requesting that the committee provide financial support to OrgSync for the 2016-2017 to give us a better opportunity to assess its usefulness. With the initial allocation for CollegiateLink being $31,250 and the cost of OrgSync being $17,500, there is $13,750 remaining from the allocated funds. Thus, we would only need $750 in new funds if the original allocation is still available.

**How will this request have a direct impact on student learning or student life?**

**What are the objectives of this project?**

OrgSync will tackle the problem of decentralization amongst student groups on campus by providing each student club and organization with a dedicated web page eliminating the need for developing off site websites while providing continuity for the group as they transition from year to year. Club members will be able to store all their club documents within the site, and club leaders and members will also be able to communicate easily across club lines. Elections for clubs will also be placed online eliminating the need for the timely process that is currently in place. Because each student will have their own individual profile in the portal, identifying student members of each club will be much easier.

The program will also create a more active environment amongst Brooklyn College students. Many students do not know how to contact clubs or become a more active member on campus. This portal will allow them to view all the clubs that exist on campus and reach out to those that pique their interests. Hence, this portal can be seen as club fair, all day, every day of the year. Also, given the centralized bulletin board and calendaring feature, students will be able to quickly view the events that are taking place at Brooklyn College, eliminating the problems of advertising events currently plaguing student clubs. Individual students will also have the capability of indicating how they choose to receive communications. The tool provides options for emails, text messaging, Twitter, and other social media tools. Thus, a club leader only need to send a message once and the individual student will receive the information based on their own preference.

In addition, many students lack the knowledge necessary to carry out vital student affairs actions, such as starting a club, applying for a budget/grant, or creating an event. This portal would grant students access to those specific types of questions, relieving the burden placed on student affairs administration. The club registration process, budget request, event request form, and student eligibility will all become automated. The system also allows students to see where their paperwork is in terms of workflow. Thus, the system will reduce the level of runaround and improve customer service.
As the portal contains viable information necessary for students and student clubs to function properly, the burden will be alleviated for student government to get that information out to all 16,000 students on campus. Student government will also be able to easily communicate and reach out to clubs to facilitate a cohesive environment. In addition, processes such as starting a club or applying for grants will greatly be facilitated through the implementation of this program. The portal will also allow students to easily view the progress and initiatives that student government continues to have.

In our research we have learned that many CUNY schools are moving to use OrgSync being that CUNY is no longer approving or renewing any contracts with CollegiateLink.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:

While the portal stands to benefit student government in a myriad of ways, it affects the entire student body as a whole. If the portal is in place, the non-active student gains access to the club scene on campus, facilitating his or her transition to becoming an active student. All clubs, as a whole, will gain as well, as their actions can be recorded and displayed to all students, increasing their membership. As student affairs actions are clearly delineated in the portal, students in all clubs and those seeking to start one will be able to do so in a much more efficient and expedient manner. Thus, this tool will serve all students, both undergraduate and undergraduate.

How will projected outcomes be assessed?

The impact of this tool will be assessed based on student use. Analytics within the system will be able to calculate the percentage of the total student population that is using it. Additionally, we will create a survey to assess the usefulness of the tool by its users.

CollegiateLink also offers a similar service for managing student organizations. However, the contract for CollegiateLink was not approved by CUNY.
Proposal Title: The Bulldog Connection

Description of Proposed Project: (up to 5000 symbols):

For the 2015-2016 academic year, the Technology Fee Committee awarded the Student Governments of Brooklyn College $31,250 to acquire CollegiateLink, a new online tool that will improve student services and support college-sponsored student activities. The funds were to support the tool for one year with an assessment being done at the conclusion of the year. Unfortunately, the contract for CollegiateLink was not approved by CUNY, and a new vendor was secured. The contract for OrgSync was signed on August 25, 2015 in the amount of $17,500 for one full year plus on-site training.

OrgSync, rebranded as The Bulldog Connection, provides a platform for promoting student learning and growth through co-curricular opportunities while centralizing and organizing processes and procedures. The Bulldog Connection will streamline many campus activities processes and provide the following tools to manage student organizations:

- Customize an organization profile with content and graphics.
- Manage club rosters and fill positions with newly-recruited members.
- Send out e-mail or text messages (SMS) to specific officers, event attendees, or an entire organization membership list.
- Promote events through an online calendar that simultaneously includes all posted events on a campus-wide calendar.
- Hold secure online elections for open officer positions.
- Upload lists of students, send out invitations, monitor RSVP status, and track attendance using card-swipe or barcode readers.
- Approve service hours completed by organization members.
- Store electronic documents, photos, and other files and control who can access them.

With the delay in implementation of the tool due to contract negotiations, we are unable to complete one full year of training. The tool will go live at the end of the fall semester providing us with only one semester of usage. Thus, we are requesting that the committee provide financial support to OrgSync for the 2016-2017 to give us a better opportunity to assess its usefulness. With the initial allocation for CollegiateLink being $31,250 and the cost of OrgSync being $17,500, there is $13,750 remaining from the allocated funds. Thus, we would only need $750 in new funds if the original allocation is still available.
**Estimated Total Cost:** 14500

(9500 annual subscription, 3500 annual subscription – budget management system, 1500 annual subscription – umbrella portal)

**How will this request have a direct impact on student learning or student life? What are the objectives of this project? (up to 5000 symbols)**

OrgSync will tackle the problem of decentralization amongst student groups on campus by providing each student club and organization with a dedicated web page eliminating the need for developing off site websites while providing continuity for the group as they transition from year to year. Club members will be able to store all their club documents within the site, and club leaders and members will also be able to communicate easily across club lines. Elections for clubs will also be placed online eliminating the need for the timely process that is currently in place. Because each student will have their own individual profile in the portal, identifying student members of each club will be much easier.

The program will also create a more active environment amongst Brooklyn College students. Many students do not know how to contact clubs or become a more active member on campus. This portal will allow them to view all the clubs that exist on campus and reach out to those that pique their interests. Hence, this portal can be seen as club fair, all day, every day of the year. Also, given the centralized bulletin board and calendaring feature, students will be able to quickly view the events that are taking place at Brooklyn College, eliminating the problems of advertising events currently plaguing student clubs. Individual students will also have the capability of indicating how they choose to receive communications. The tool provides options for emails, text messaging, Twitter, and other social media tools. Thus, a club leader only need to send a message once and the individual student will receive the information based on their own preference.

In addition, many students lack the knowledge necessary to carry out vital student affairs actions, such as starting a club, applying for a budget/grant, or creating an event. This portal would grant students access to those specific types of questions, relieving the burden placed on student affairs administration. The club registration process, budget request, event request form, and student eligibility will all become automated. The system also allows students to see where their paperwork is in terms of workflow. Thus, the system will reduce the level of runaround and improve customer service.

As the portal contains viable information necessary for students and student clubs to function properly, the burden will be alleviated for student government to get that information out to all 16,000 students on campus. Student government will also be able to easily communicate and reach out to clubs to facilitate a cohesive environment. In addition, processes such as starting a club or applying for grants will greatly be facilitated through the implementation of this program. The portal will also allow students to easily view the progress and initiatives that student government continues to have.
In our research we have learned that many CUNY schools are moving to use OrgSync being that CUNY is no longer approving or renewing any contracts with CollegiateLink.

Please describe how many students will be served each term through the funding of this project, and through what means: (up to 5000 symbols)

While the portal stands to benefit student government in a myriad of ways, it affects the entire student body as a whole. If the portal is in place, the non-active student gains access to the club scene on campus, facilitating his or her transition to becoming an active student. All clubs, as a whole, will gain as well, as their actions can be recorded and displayed to all students, increasing their membership. As student affairs actions are clearly delineated in the portal, students in all clubs and those seeking to start one will be able to do so in a much more efficient and expedient manner. Thus, this tool will serve all students, both undergraduate and undergraduate.

How will projected outcomes be assessed?

The impact of this tool will be assessed based on student use. Analytics within the system will be able to calculate the percentage of the total student population that is using it. Additionally, we will create a survey to assess the usefulness of the tool by its users.

Are any of the items in your proposal available from only one source?

CollegiateLink also offers a similar service for managing student organizations. However, the contract for CollegiateLink was not approved by CUNY.

Indicate if this project was approved in the prior STF year pending funding availability and was not yet funded

No
Description of Proposed Project:
Cell and smart phone amplification is already serving students in Boylan, James, and part of Ingersoll Extension. This proposal seeks to extend that functionality to additional floors of Ingersoll extension that need amplification.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
This will facilitate student (and faculty) access to quality cell phone signals, as well as cell data signals, to facilitate using their handheld devices to receive calls, texts, and alerts. Unfortunately the signal strength in many areas of the campus makes such usage impossible and this is both a huge inconvenience as well as a health and safety concern during an emergency.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
All students

How will projected outcomes be assessed?
User feedback
Student Technology Fee Proposal #2016-81
Assitive Technology for the Center for Student Disability Services

Department/Office: Disability Services, Center for
Applicant Name: Stewart-Lovell, Valerie
Additional Applicant(s): KOZACK, JAMES
Primary Contact for Proposal
  Email Address: J.Kozack@brooklyn.cuny.edu
  Phone: 718 951-5787
Estimated total cost: $ 10,000.00

Description of Proposed Project:
Since the demand for specific technologies far exceeds what we currently have available in the Center; the proposed expenditure is to update and have available additional assistive technology options in an effort to provide the most appropriate accommodations for students with disabilities. Although this proposal enables students to continue to use assistive technologies as classroom modifications, students continue to use assistive technology software throughout the campus for homework assignments, projects, exams etc.
This request includes: (10) 8 GB Echo Smartpen Pro Edition, (5) I Pad Air 2 Wi-Fi + Cellular 16GB, (5) Williams Sound FM transmitters and FM Receivers, (10) Olympus - VN722PC Digital Voice Recorder - Silver

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
This will make it possible for a student to overcome academic barriers in an effort to improve the functional capabilities of students with disabilities. The objective is to provide updated and effective assistive technology for students with disabilities.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a. How many hours per week the lab will be open:
40hrs
b. Who will supervise the facility and how will that be funded ongoing:
The Center is supervised by the staff; therefore no additional funding is necessary.
c. What physical space will be used to host the facility, and who has authorized its use:
The Mamie and Frank Goldstein Resource Center located in the Center for Student Disability Services
d. If any renovations or furnishings will be required to support the project, how will they be funded?
n/a

Please describe how many students will be served each term through the funding of this project, and through what means:
The proposed expenditure will be available to all students currently registered at the Center who uses assistive technology as an accommodation.

How will projected outcomes be assessed?
Outcomes will be assessed through the use of an effectiveness survey.
8GB Echo smartpen Pro Edition

SKU: APX-00018

Save notes & pencasts directly to your computer
- Record everything you hear, say and write, while linking your audio recordings to your notes.
- Replay audio directly from paper by tapping on your notes
- Echo Desktop software allows you to save, organize and play back interactive notes from your Mac or Windows computer.
- Search for words within your notes.
- Share notes and pencasts as images.
- Send notes and audio to any destination.
- Comes with Smartpen Portfolio, 3-D Recording Headset, 2 ink cartridges & 2 caps.
- Includes MyScript for Livescribe, the fastest way to convert your handwritten notes into digital text

Compatibility
- Mac or Windows computer that meets system requirements

Availability: In stock

$199.95

QTY: 1

ADD TO CART

WHAT'S INCLUDED
- Echo smartpen with 8GB of memory (actual user available memory will be less)
- Smartpen Portfolio
- Starter dot paper notebook (100 pages)

http://store.livescribe.com/wishlist/index/add/product/701/form_key/osylQ7oD16MSWrWU/
PFM PRO

description

The PFM PRO and rechargeable PFM PRO RCH deliver superior audio directly to the ear, enhancing sound at home, work, or school — anywhere background noise or distance from the source makes listening difficult. Each system features 17 selectable channels on the 72-76 MHz band and has an operating range of up to 150 feet. A versatile 3.5mm jack allows for a variety of earphones and headphone options, and is compatible with neckloop and telecoil-equipped hearing aids (not included with system).

DISCLAIMER: FCC rules limit use of this equipment to auditory assistance.

NOTE: The PFM PRO and PFM PRO RCH systems are approved by the FCC for operation in U.S. markets. These systems cannot be used in all countries. Check with your government’s radio regulations for 72-76 MHz operation.

system includes

- (1) FM Body-pack Transmitter (PPA T46)
- (1) FM Body-pack Receiver (PPA R57)
- (1) Single Mini Earphone (EAR 041)
- (1) Folding Headphone (HEAD 021)
- (1) Audio Input Cable (WCA 087)
- (1) Lavaliere Microphone (MJC 090)
- (2) AA Alkaline Batteries (BAT 001-2)
- (1) System Carry Case (CCS 043)

features

- 17 selectable channels
- 72-76 MHz
- Auxiliary input — broadcast any audio source
- FM signal, compression, mute control
- Operates up to 150' (46 m)
- Improves listening for individuals or groups
- Lifetime PLUS Limited Warranty

specifications

bat 001-2
Alkaline, 1.2 Volt

ccs 043

ear 041

Style Single, in-ear, isolation earphone
**Olympus - VN-722PC Digital Voice Recorder - Silver**

Model: V403415SU01 | SKU: 590102

Voice-activated operation; 4GB internal memory; microSD card slot; up to 1,600 hours of recording time; simple mode; calendar search function; USB connectivity

4.5 (51 Reviews)

$59.99

Add to Compare

---

**Sony Digital Voice Recorder**

Model: ICDBX100 | SKU: 1391044472

Voice-activated recording; 16GB internal flash memory; memory card slot; up to 636 hours of recording time; dual analog/digital converters; prerecord mode; manual and automatic gain control; 5-micron digital amplification

4.8 (4 Reviews)

Sold & Shipped by: FireBall

Check Shipping & Availability

Marketplace $223.39

Add to Cart

Available from 3 Sellers

Free Shipping

---

**AGPtek - 4GB Digital Voice Recorder**

Model: UR4J/PR4 | SKU: 1398740972

4 GB Flash Memory - Portable

5 (1 Review)

Sold & Shipped by: Mambate

Check Shipping & Availability

Marketplace $21.99

Add to Cart

SAVE $5 (Reg. $26.99)

Free Shipping

---

**AGPtek - 4GB Digital Voice Recorder - Gray**

Model: UR4J/PR8 | SKU: 1327708345

4 GB Flash Memory - Portable

2 (1 Review)

Sold & Shipped by: Mambate

Check Shipping & Availability

Marketplace $21.99

Add to Cart

SAVE $78 (Reg. $99.99)

Free Shipping

---

**Olympus - 8GB Digital Voice Recorder**

Model: W510 | SKU: 1510095480

8 GB Flash Memory - Portable

Be the first to write a review.

Sold & Shipped by: Neobits

Check Shipping & Availability

Marketplace $131.45

Add to Cart

SAVE $88.54 (Reg. $199.99)

---

**AGPtek - 4GB Digital Voice Recorder**

Model: UR4Y | SKU: 1308512183

4 GB Flash Memory - Portable

Be the first to write a review.

Sold & Shipped by: Mambate

Marketplace $21.99

Add to Cart

SAVE $78 (Reg. $99.99)
**BILL TO:** VALERIE 718-951-5538  
BROOKLYN COLLEGE CUNY  
2900 BEDFORD AVE  
ROOM 4400 / BOYLAN HALL  
BROOKLYN, NY 11210

**SHIP TO:**  
BROOKLYN COLLEGE CUNY  
2900 BEDFORD AVE  
ROOM 4400 / BOYLAN HALL  
BROOKLYN, NY 11210

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**Order Comments:**  
**Quotation valid for 30 days**

**TOTAL QUOTE:** 1,318.20

**TERMS AND CONDITIONS**  
This quotation is a firm quotation for a period of 30 days from above date. We reserve the right at any time to correct clerical errors.

**Export Compliance.** Williams Sound, LLC and Buyer of Williams Sound products are subject to comply with U.S. Export Administration Regulations. Buyers who are reselling or distributing products agree that they will not re-export or otherwise transfer, directly or indirectly, goods provided by Seller that may constitute a violation of U.S. laws. Buyer agrees not to divert or sell products contrary to the laws and regulations prohibiting the export of U.S.-produced products to any prohibited party or country. Buyer is responsible for obtaining the necessary authorization and instruction from their customers to ensure compliance with export control regulations.
Description of Proposed Project:
Library classroom room 384 is currently undergoing a complete redesign and upgrade. The room is the only Apple classroom on campus that is available for reserve by classroom faculty on an interim per needs basis through the Library's web site. The room is being renovated because it no longer meets the needs of the Library or the College. Currently there are 22 working IMACS in the room, and the seating capacity is below 30. This is below the required needs of many of the classes who seek to use it. The new design will have an instructor station, podium, and 33 student computers capable of operating in both MAC OS and Windows modes. In Spring 2015, Faculty Lab Staff processed 401 classroom reservation requests (221 Windows, Room 383; 180 Mac OS X, Room 384). To date in Fall 2015, (Nov 24, 2015) we have processed 357 requests (211 Windows; 146 Mac OS X)

Increasing the student capacity will increase the Room 384's usage. To complete the room, 34 Mac computers are needed. (Instructor +33 student PCs). The computers currently in the room are 6 years old, installed in 2009, but could be recycled to meet other College needs.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
More classes can be taught in the room. Increasing class size is essential and we need to accommodate the larger classes.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
72 week

b. Who will supervise the facility and how will that be funded ongoing:
The classroom will be supervised from the Faculty Lab, Room 381, directly across the hall. Funding for the classroom and Faculty Lab is provided yearly as part of the Library's annual budget

c. What physical space will be used to host the facility, and who has authorized its use:
Requested bookings through the Library's web site and approval through the Faculty Lab.

d. If any renovations or furnishings will be required to support the project, how will they be funded?
Renovation of 384 is through donor funding. Renovations will be completed during the Spring semester, 2016.

Please describe how many students will be served each term through the funding of this project, and through what means:
The room is available to all BC classes. Potentially all BC students can benefit.

How will projected outcomes be assessed?
Increased bookings
Student Technology Fee Proposal #2016-80

Laptop Loan Program Replenishment

Description of Proposed Project:
With the improved WiFi access on campus, the student laptop loan program has been increasing in popularity. Especially popular are MacBooks (Pro and Air) and the lite-weight Dell models. Total usage for period: Spring 2015 (Jan 1 ? May 28, 2015) was 3,609 loans; Fall (partial Sept 1 - Nov 24) is 2,802. The entire student body (approx. 19,000 students) could benefit from this project. The Library is an important and popular student computing and work area. The number of laptops loaned has grown significantly. Undergraduates can borrow laptops for a 1 day or 3 day period. Graduate students can borrow laptops for a 30 day period. The popularity of the Library as a technological work center has often resulted in long lines waiting for a computer during the peak hours of the day, and during the midterm and finals periods of the semester. The availability of laptops helps to alleviate the problem by making more computers available reducing congestion and competition for a workstation.

The current number of available Dell Laptops is 116 and the number of Macs is 46. Unfortunately, 35 laptops were removed from the program as being unrepairable and cannibalized for parts. More than 50% of the Dell laptops are out of warrantee, most being over 4 years in daily service. The current inventory of laptops is included as an appendix.

The program is requesting 10 new MacBook Pros; 20 Macbook Air; 30 Dell laptops. Macbook Pro $14,000, Macbook Air $18,000; Dell laptops 18,000 Total $50,000.

<table>
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<td>332015</td>
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<td>Total46</td>
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</tr>
<tr>
<td>Apple iPad</td>
<td>5</td>
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</table>

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
Provide computing access to students who do not own a personal computer or are hesitant to risk carrying their personal computer on public transportation. Reduce the long lines waiting for a computer during the peak hours of the day, and during the midterm and finals periods of the semester. Allow student to carry a personal computer to the classroom on campus.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a. How many hours per week the lab will be open:
b. Who will supervise the facility and how will that be funded ongoing:
The Laptop loan program is centered and supervised at the New Media Center, 2nd floor Library. Funding is ongoing.

c. What physical space will be used to host the facility, and who has authorized its use:
The New Media Center, 2nd floor Library

d. If any renovations or furnishings will be required to support the project, how will they be funded?
none

Please describe how many students will be served each term through the funding of this project, and through what means:
Potentially all 19,000 BC students can benefit.

How will projected outcomes be assessed?
Increased borrowing
Description of Proposed Project:
Brooklyn College offers a wide variety of undergraduate and graduate degrees in STEM majors: Anthropology and Archaeology, Biology, Chemistry, Computer and Information Science, Earth and Environmental sciences, Health and Nutrition Sciences, Kinesiology, Mathematics Physics, and Psychology. Brooklyn also participates in the PhD programs through the Grad Center and in the future at this campus.

We also partner with several Brooklyn High Schools in the STAR program to prepare students to seek STEM majors.

In support of the CUNY wide STEM initiative, as well as supporting other general academic needs, CUNY Central purchased the 13 subject collections of Springer e-books from 2009 to 2013. However, Central is unable to purchase the collections going forward.

Springer is a world renowned STEM publisher. This proposal is to purchase all subject collections for the years 2014, 2015, and 2016. They are primarily STEM titles, but include Business & Economics, a great benefit to the Koppleman School of Business. The collections include many text books which could be adopted for courses. The three collections include over 20,550 discrete titles. This averages out to about $3.50 per book.

Once the books are purchased, there is no ongoing cost. In addition, they are DRM (Digital Rights Management) Free and provide unlimited usage.

Previous data shows heavy and increasing usage by Brooklyn College: (Usage is the main assessment tool). Brooklyn College already has a record of substantial usage of these books This is usage for the collections purchased by CUNY Central (2009 ? 2013). Usage in prior years reflect chapter level:

<table>
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<th>Year</th>
<th>Usage</th>
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<td>2013</td>
<td>6,595</td>
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<tr>
<td>2014</td>
<td>12,670</td>
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<tr>
<td>2015</td>
<td>6,889 (6 months)</td>
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The proposed collections include over 20,550 discrete titles:

- Behavioral Sciences: 502 titles
- Biomedical & Life Science: 1,773 titles
- Business & Economics: 1,358 titles
- Chemistry & Materials Science: 856 titles
- Computer Science: 3,345
- Earth & Environmental Science: 1,094 titles
- Energy: 340 titles
- Engineering: 2,750 titles
- Humanities, Social Science and Law: 2,087 titles
- Mathematics & Statistics: 1,628 titles
- Medicine: 2,269 titles
- Physics & Astronomy: and 1,140 titles
- Professional & Applied Computing: 625 titles

(enter rounded dollar amount with no dollar sign, commas, or cents)
The collection can be purchased yearly.
2014  $25,500
Estimated total cost:
2015  $27,795
2016  $29,441
Total    70580  (15% discount)

(enter rounded dollar amount
with no dollar sign, commas, or cents)

The collection can be purchased yearly.
2014  $25,500
2015  $27,795
2016  $29,441
Total    70580  (15% discount)

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
These books will be in the CUNY+ catalog and will be available 24x7.
They are in subjects which mirror our academic departments and should garner usage.
In addition, the ebooks will have a major impact on improving the quality of Faculty and Graduate research.
This proposal aims to provide the latest scientific and business publications to our students. City College and Hunter College have purchased these collections. However, for electronic books, Interlibrary loan is not a possibility. This will eliminate frustration of finding a title in the catalog and not having access by Brooklyn students.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:
NA

b. Who will supervise the facility and how will that be funded ongoing:
NA

c. What physical space will be used to host the facility, and who has authorized its use:
NA

d. If any renovations or furnishings will be required to support the project, how will they be funded?
NA

Please describe how many students will be served each term through the funding of this project, and through what means:
Potentially all 19,000 Brooklyn College students could benefit. Any student will have access. Since they are unlimited usage, there will never be a turnaway.

However the major beneficiaries of this proposal will be the students in the STEM and Business departments. The books are geared to upper undergraduates, graduate students and the honors college.

Springer also has a feature whereby students can order a print copy of a books (often priced above $75) for $25.00, making them ideal for texts.

How will projected outcomes be assessed?
Increased usage. Usage is the main assessment tool.
December 2, 2015

Susan Vaughn  
CUNY Brooklyn College  
2900 Bedford Avenue  
Brooklyn, NY 11210  
USA

Dear Susan Vaughn,

The eBooks which your institution need for research purposes can not be obtained from any other publisher other than Springer. Scholarly publishing dictates that research papers can only be published in one primary source so therefore the chapters within the Springer eBooks are not accessible in any other publication in their original form. Springer is the sole owner of the copyright to all scholarly publishing within Springer publications.

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We appreciate your business and look forward to providing you additional online products to meet your end-users’ future needs.

Please feel free to contact us should you require further assistance.

Best Regards,

Signed: _____________________________

Date: _____________________________

David Celano  
Vice President, Library Sales Americas  
Tel: (212) 620-8419  
David.Celano@springer.com