Northern Virginia Community College

2016-17

Campus and Unit Technology Plans

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<td>49</td>
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</table>
Alexandria Campus

FY17 Campus Technology Plan

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Amount</th>
<th>Start Date</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT (Information Technology)</td>
<td>$990,000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>$333,492.68</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>LTR (Learning and Technology Resources)</td>
<td>$158,399</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>MSE (Math, Sciences &amp; Engineering)</td>
<td>$25,375</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>SPS (Social &amp; Professional Sciences)</td>
<td>$69,169</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>SSC (Student Services Center)</td>
<td>$6,465</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td><strong>TOTAL TECH PLAN</strong></td>
<td><strong>$1,582,900.60</strong></td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
</tbody>
</table>

**NARRATIVE**

1) **IT**

   a. **IT Manager Maintenance & Operations (M&O)** $20,000

   Supervisor Responsible: Dave Babel (IT Manager)
   Planned implementation date: 7/1/16
   Planned Completion date: 6/30/17
   Expected Source of Funds: Campus Tech Plan

   Description: $20,000 is needed for network cabling materials and to pay for the labor costs that the contractor bills for installing network cabling.

   Funds are also needed for various IT Operations/Technology items including KVM switches, a degaussing machine, remote software utilities for IT Staff to use centrally, tool sets, spare hard drives, spare RAM, keyboards and mice, and spare power supplies to replace bad computer parts, HDMI to mini-display port adapters, VGA to HDMI adapters, and computer-video cables.

   b. **Audio/Visual Equipment Support** $15,000

   Supervisor Responsible: Dave Babel (IT Manager)
   Planned implementation date: 7/1/16
   Planned Completion date: 6/30/17
   Expected Source of Funds: Campus Tech Plan

   Maintenance and supply items are needed to support the A/V equipment in classrooms to include lamps/bulbs for LCD projectors, standby LCD projectors, digital audio/video cabling, and necessary systems repair for items that are out of warranty.

   c. **Annual Classroom Technology Upgrades and Conversion To 100% Digital Technology** $120,000

   Supervisor Responsible: Dave Babel (IT Manager)
   Planned implementation date: 7/1/16
   Planned Completion date: 6/30/17
   Expected Source of Funds: Campus Tech Plan

   The campus is responsible for paying for upgrading the last 10 classrooms remaining to be upgraded to 100% digital AV technology. The estimated cost per classroom is $12,000 and includes lecterns.
d. New Academic Building Information Technology Infrastructure $371,000
Supervisor Responsible: David Babel (IT Manager) Planned
implementation date: 7/1/16
Planned Completion date: 6/30/17 Expected
Source of Funds: FF&E

Funding from Furniture, Fixtures and Equipment (FF&E) would be used to purchase the Information Technology Infrastructure equipment including data switches, communication racks, patch panels, wireless access points, multi-function copier/printers and the local area network connection equipment to connect the Replacement Building to the campus and college network.

e. New Academic Building Audio Visual Infrastructure and Digital Classrooms $464,000
Person Responsible: David Babel (IT Manager) Planned
implementation date: 7/1/16
Planned Completion date: 6/30/17 Expected
Source of Funds: FF&E

Funding from Furniture, Fixtures and Equipment (FF&E) will implement digital audio visual presentation equipment, digital classroom control and switching equipment, touch-screen source selection interface units, media-friendly systems, Mac servers and lecterns in the Replacement Building. This also includes all Interactive presentation devices, wiring and installation costs. 23 classrooms total.

2) Liberal Arts

<table>
<thead>
<tr>
<th>Total</th>
<th>$333,492.68</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Communication Design: Total</td>
<td>$35,024</td>
</tr>
<tr>
<td>Person Responsible: Lisa Hill (AD Communication Design) Planned</td>
<td></td>
</tr>
<tr>
<td>implementation date: 7/1/16</td>
<td></td>
</tr>
<tr>
<td>Planned Completion date: 6/30/17</td>
<td></td>
</tr>
<tr>
<td>Expected Source of Funds: Campus Tech Plan &amp; ETF funds</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>4 Wacom Cintiq 22HD $1,800/each</td>
<td>$7,200</td>
</tr>
<tr>
<td>9 Mac Pros with Quad Core $3000/each (to use with Cintiqs*)</td>
<td>27,000</td>
</tr>
</tbody>
</table>

*We need Mac Pro’s to use with the Cintiqs. We do not have enough space to hook the cintiqs up to an iMac and these will process faster for animation and multimedia. These can replace 9 imacs that are currently in the Communication Design labs. Cintiqs are used in a number of our classes including Illustration, animation, multimedia, and graphic design. We currently have 5 Cintiqs that we need the Mac Pros for. Our goal is to have 9 total so we can keep 3 each in 3 different labs.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>2 Sunpak VideoPro - M2 Fluid Head Tripods $105 each</td>
<td>$210</td>
</tr>
<tr>
<td>1 Bescor FP-500K Bi-Color LED Two Light Kit</td>
<td>$470</td>
</tr>
<tr>
<td>1 Shure SM58-CN Cardioid Dynamic Vocal Microphone with Cable</td>
<td>$110</td>
</tr>
<tr>
<td>1 1/4 In Stereo Male To Xlr 3 Pin Female Adapter</td>
<td>$9</td>
</tr>
<tr>
<td>1 Samson MK-10 Microphone Boom Stand</td>
<td>$25</td>
</tr>
</tbody>
</table>

b. Music Department Equipment/instrument Needs: TOTAL $8,107.68

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 3 Opti Plex Dell PCs</td>
<td>$2,821.77</td>
</tr>
</tbody>
</table>

Person Responsible: Jonathan Kolm
Planned Implementation Date: 7/1/2016
Planned Completion Date: 7/1/2017
Expected Source of Funds: Campus Tech Plan
This PC Screen size will fit the enclosure for the Flat Screen Garage Table and has a decent memory and processor for Music Applications.

2. **3 Martin Logan 5.1 Soundbars**  $5,099.94  
Person Responsible: Jonathan Kolm  
Planned Implementation Date: 7/1/2016  
Planned Completion Date: 7/1/2017  
Expected Source of Funds: Campus Tech Plan

This speaker is a contained 5.1 sound unit and can be mounted on the wall for compact design and great sound quality for use in music lessons.

3. **3 Snowball USB Microphones**  $185.97  
Person Responsible: Jonathan Kolm  
Planned Implementation Date: 7/1/2016  
Planned Completion Date: 7/1/2017  
Expected Source of Funds: Campus Tech Plan

This microphone is perfect to record student lessons, and to use as a teaching aid.

c. **Photography and Media Photography + Media Program**  Total $32,400

1. **Quantity 6 15 MacBook Pro laptop w/Retina display 2.5 GHz**  $13,800  
Person Responsible: Aya Takashima  
Planned Implementation Date: 7/1/16  
Planned Completion Date: 6/30/17  
Expected Source of Funds: Campus Tech Plan or FF&E

These laptops will be used at each of the six lighting setups in the Lighting Studio for tethered shooting that allows the photographer to more accurately judge the sharpness, color, lighting and composition of the image while photographing.

2. **Quantity 6 JVC GY-HM200 4K Pro Camcorders with shotgun microphone, bag, and extra battery**  $13,500  
Person Responsible: Page Carr  
Planned Implementation Date: 7/1/16  
Planned Completion Date: 6/30/17  
Expected Source of Funds: FF&E

Six identical camcorders are needed for video classes so that students can learn on the same camera equipment. These will replace our current camcorders that are over six years old.

3. **Quantity 2 Cole Lip Microphones**  $1,800  
Person Responsible: Page Carr  
Planned Implementation Date: 7/1/16  
Planned Completion Date: 6/30/17  
Expected Source of Funds: Campus Tech Plan or FF&E

These unique ambient noise-cancelling microphones will allow students to record voice over audio for video without the need for a sound-controlled audio recording booth.

4. **Quantity 5 Wacom Intuos Pro Pen and Brush Tablets**
Black, Medium 8.8x5.5”  
Person Responsible: Aya Takashima  
Planned Implementation Date: 7/1/16  
Planned Completion Date: 6/30/17  
Expected Source of Funds: Campus Tech Plan or FF&E

These graphic tablet and pen/brush input/output devices allow photographers working in photography post-processing software such as Adobe Photoshop to draw, retouch and manipulate images with real time variable pressure width and opacity strokes and see the results directly on their image.

5. **Quantity 1 Ikan D7W Waveform Field Monitor Deluxe Kit with Nikon EN-EL-15 and Canon LP-E6 battery plates**  
Person Responsible: Page Carr  
Planned Implementation Date: 7/1/16  
Planned Completion Date: 6/30/17  
Expected Source of Funds: Campus Tech Plan or FF&E

This field monitor would allow remote monitoring of a moving camcorder by a video team or director who can better concentrate on composition, lighting, acting and directing the camera person.

d. **Communication Design:**  
Person Responsible: Lisa Hill (AD Communication Design)  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/17  
Expected Source of Funds: FF&E

1 Bretford Mobility Cart for MacBook Pros 15 inch for 30 units  
2 Mac 15" Macbook Pro with Retina display laptops (24 x $3,000 each) with Applecare protection

In the new building Communication Design will have lost one complete Mac lab that we currently schedule classes in. We want to convert the desktop lab to a mobility cart with laptops so we can use the computers in our studio classrooms.

3 wifi boosts for iPad and laptop carts (3 x $100 each)  
1 Ricoh Aficio SP C820DN Laser Printer  
1 Epson Pro 7900 24" Printer  
4 EPSON Home Cinema Projectors 5030UB/5030Ube (4x$3,000 each)  
4 electric Projector Screens 12 feet wide (4 x $2000 each)  
6 Sharp 90" LC90LE657U AQUOS Full HD LED Monitor (6 x $7,000 each)  
6 Wall mounts for 90" monitor TILT TV WALL MOUNT For Sharp LC-90LE745U 90" INCH LED HDTV HD TV TELEVISION (6 x $110 EACH)  
4 Surround Sound Speakers Acoustimass® 6 Series V home theater speaker system (4 x $700 each)  
4 Yamaha RX-V477 5.1-Channel Network AV Receiver with Airplay to pair with surround sound systems (4 x $350 each)  
8 12’ magnetic whiteboards (8 x $600 each)  
5 Mayline 5-Drawer Flat Files with 20 inch base for 30 x 42 inch sheets to store artwork and project (5 x $3000 each (office))  
2 Mayline 5-Drawer Flat Files with 20 inch base for 24 x 36 inch sheets

Total $173,106
e. Production Room:  
Person Responsible: Lisa Hill (AD Communication Design)  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/17  
Expected Source of Funds: FF&E

4 Artograph LightPad Series Light Boxes with Super Bright LED lamps  
12x17 inches (4 x $200 each)  
1 Fletcher 2200 48" Professional Mat Cutting System  
1 Fletcher 3000 Multi-Material Wall-Mount Cutter 60"  
2 Dry mounting presses/27"x23"x11" (WDH) Dry mounting presses  
(2 x $1800 each)  
1 120 Volt/60Hertz UV Light Source (16"x20") Unit with pull-out drawer vacuum frame/28.5"x24"x8.5" (WDH)1 UV exposure unit

f. Art Gallery  
Person Responsible: Lisa Hill (AD Communication Design)  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/17  
Expected Source of Funds: FF&E

3 Sharp 90" LC90LE657U AQUOS Full HD LED Monitor Rooms  
(3 x $7000 each)  
1 Wall mount for 90" monitor TILT TV WALL MOUNT For Sharp LC-90LE745U  
90" Inch LED HDTV HD TV TELEVISION  
$110 EACH  
2 Portable stands for 90" monitors /Silver-80-TV-Cart-with-Rolling-Caster-Wheels  
(2 x $550 each)  
2 Bose SoundLink Mini Bluetooth Speaker  
(Portable Speaker System for portable monitors) (2 x $200 each)  
2 PowerLite Pro Z11000WNL projector for gallery displays and installation  
(2x$17,500 each) (These need to swivel to project onto different walls)  
5 Mac minis to run two projectors and three HD monitors  
with key board, mouse, etc. 3.0GHZ Dual-Core  
Intel CORE i7 processor 1TB Serial ATA Drive (5 x $1300 each)  
1 Genie Personnel Lift 30' AWP-25S or AWP-30S  
Various cables, adapters locks, etc. for all equipment.

3) LTR  
Total $158,399

a. Division Request  
Supervisor Responsible: Dr. Frances Villagran-Glover, LTR Dean  
Planned Implementation Date: 7/1/16  
Planned Completion Date: 6/30/17  
Total $2,400
Expected Source of Funds: Campus Tech Plan

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td><strong>Digital Signage</strong></td>
<td>$2,400</td>
</tr>
<tr>
<td>2 Digital Signage Player box</td>
<td>$800</td>
</tr>
<tr>
<td>2 50-inch monitor</td>
<td>$1000</td>
</tr>
<tr>
<td>Installation fee</td>
<td>$600</td>
</tr>
</tbody>
</table>

Two digital signs will be placed near two main entrances in Bisdorf Building for advertising current events on campus with easy to modify features.

b. **TILT Equipment Needs:**

Supervisor Responsible: Kirstin Riddick, TILT
Planned Implementation Date: 7/1/16
Planned Completion Date: 6/30/17
Expected Source of Funds: Campus Tech Plan

1. **Macbook Airs for TILT Center (4 total)**

Macbook Airs will be utilized in the TILT Center to facilitate Apple-specific based workshops for the NOVA learning community. *These Macbook Airs will replace all obsolete Macbooks currently located in TILT.*

2. **iPad Air 2 (120 total)**

There is an increased usage of mobile technology usage in the classroom. Instructors are using the tools to facilitate classes, video classroom experiences, engage students, proctor assessments, and conduct surveys. Some students may not have their own personal devices. Providing access to mobile carts with customized instructional apps gives all participants access to mobile technologies. 30 iPad Airs will used for classroom purposes. iPad Airs will also be used in the TILT Center for workshop facilitation and individual student use. *These iPad Airs will replace all obsolete iPad 2s and 3s located in TILT, OCL, Engineering, and Tyler.*

3. **iPad Pros (10 total)**

There is an increase usage of mobile technology usage in the classroom. Instructors are using the tools to facilitate classes, engage students, and proctor assessments. Some students may not have their own personal devices. iPad Pros will also be used in the TILT Center for workshop facilitation and demonstration.

4. **Lock n Charge Sync and Charge Carts (5 total)**

There is an increase usage of mobile technology usage in the classroom. Instructors are using the tools to facilitate classes, engage students, and proctor assessments. Tablet management carts will enable the TILT team to maintain and sync devices with ease. Additionally, this will allow instructors to transport tablets (in smaller bundles) to the classroom with ease. *These Lock n Charge Sync carts will replace all obsolete Belkin Charging Carts located in TILT, OCL, Engineering, and Tyler.*

5. **SWIVL Wireless Classroom Bundle (5 total)**

The SWIVL will redefine how one can use video in the classroom and beyond. SWIVL can be used by instructors and trainers to create in-class video lectures using a mobile device (iPad). These videos can be used for self-evaluation and coaching for instructors. The videos can also be used to ensure continuity of instruction for students (lecture capture).

6. **iMac (1)**

*One iMac is needed to replace the obsolete iMac* in TILT that is currently used for iPad App Deployment purposes through Apple Configurator 2. The iMac currently used is unable to update its operating system and can no longer support the newest configurator software.
7. **TPS Response Card Clickers (3 sets of 32)** $2,500
There has been an increased use of clicker technology use in the classroom and during large group student sessions (i.e., Math Competitions, Constitution Week, Student Orientations) for surveys and assessments. *Turning Point Clickers will be purchased to replace obsolete and missing clickers.*

8. **HP Sprout with 3D Capture Stage (1 Total)** $2,000
The HP Sprout is a 3 in one computer that scans 3-D objects and makes the scans 3-D printer ready. Working in conjunction with the Makerbot 3-D printer, NOVA’s learning community will be able to create and print 3-D models for instructional/learning purposes.

c. **Library Equipment Needs:**

   Total $29,687
   Supervisor Responsible: Matthew Todd, Library
   Planned Implementation Date: 9/1/2016
   Planned Completion Date: 6/30/17
   Expected Source of Funds: Campus Tech Plan

1. **Laptop Kiosk for a 12-bay system** $29,687

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-bay Laptop Host Station 30”w x 29”d x 60”h set for Default Laptop device with RFID 4.0 Technology</td>
<td>1</td>
<td></td>
<td>$23,950</td>
</tr>
<tr>
<td>Annual Hardware Service Agreement, Gold level at 6% of equipment cost</td>
<td>1</td>
<td></td>
<td>$1,437/year</td>
</tr>
<tr>
<td>Annual Software License Agreement per Host Station</td>
<td>1</td>
<td></td>
<td>$1,800/year</td>
</tr>
<tr>
<td>Custom Kiosk Graphics</td>
<td>1</td>
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<td>$950</td>
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<tr>
<td>Faronics DeepFreeze Licenses (Optional: On-site Installation and training)</td>
<td>12</td>
<td></td>
<td>$250</td>
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<tr>
<td>Custom Wooden Crate</td>
<td>1</td>
<td></td>
<td>$600</td>
</tr>
<tr>
<td>Prepay and Add Shipping</td>
<td>1</td>
<td></td>
<td>$700</td>
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</tbody>
</table>

In response to repeated student demand, driven largely by availability of this same service at the Annandale campus, the self-service lap-top kiosk would allow students to borrow a Dell lap-top for on-campus use for a four hour period. The loan is tracked through the Library circulation software and requires students to consent to a damage/loss/replacement agreement. The kiosk automatically reboots, refreshes and wipes each laptop after every use. Placement of the kiosk in a public area (Bisdorf Phase I lobby) would provide access outside normal LTR operating hours. This service would enhance student access to technology for classroom, homework, research and other academic use. The Annandale campus having piloted this service has already worked with NOVA and VCCS IT support to implement functionality. Since the Annandale kiosk came online in August 2015 there have been over 7,000 uses.

d. **Academic Success Center Equipment Needs:**

   Total $3,032
   Supervisor Responsible: Courtney Boland, ASC
   Planned Implementation Date: 7/1/16
   Planned Completion Date: 6/30/17
   Expected Source of Funds: Campus Tech Plan

2 Dell GX9020 Desktop Computers ($880 each) $1,760
2 Smart Locking Lecterns ($438) $876
The Academic Success Center has recently purchased a college-wide license for Accudemia, a cloud based tutor tracking software. In order for the software to accurately track tutoring services, students will need to sign in and out of the center for each visit. Our current check-in system will not be able to support the new software program. At this time we only use one laptop as a sign in station and often have a line due to the number of students trying to check-in to the center. As the demand will double for the check-in/out station we will need to double the amount of space needed to support the process. Therefore we are requesting 2 desktop computers and locking computer lecterns. The computer stations will serve as the new sign-in/out stations to better support students using the new software and to better capture the demand of tutoring services. Additionally the improved stations will insure security of devices as well as improve customer service. The card readers will plug into the USB ports of the computer and will be programmed to pull the emplid number from the students’ ID cards. This will help to create a faster check-in/out process for students signing in to the center. We require students have their ID on their person for all services. If the students swipe their card, the Accudemia system will read their ID number and prepopulate all of the sign-in fields. If we do not have the card readers students will have to fill in all of the sign-in fields for each check in and this will slow the process and discourage students from using the services.

e. Testing Center Equipment Needs:  
Supervisor Responsible: Ella Gilliam, Testing Center  
Planned Implementation Date: 7/1/16  
Expected Source of Funds: Campus Tech Plan  

4 Cisco Camera  
$3,200  
Cisco Surveillance 7.5.1 Camera. (4 each, wiring incl. $3200) The Testing Center is in need of 4 additional cameras to maximize coverage of two testing labs. Initially, the Public Safety Engineer had requested a minimum of 11 cameras for our two labs. However, only 8 cameras were approved. With only 8 cameras we have limited visibility of some areas and depending on the position a student sits, we could have no visibility. The use of cameras has significantly aided our staff in ensuring he academic integrity standards are met

4) MSE Division Equipment Needs  
Person Responsible: Chad Knights, MSE Dean  
Implementation date: 7/1/16  
Expected Source of Funds: Campus Tech Plan  
Planned completion date: 8/1/17  

a. Dean/Division Requests  
Person Responsible: Chad Knights, MSE Dean  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/17  
Expected source of funds: Campus Tech Plan  

1. Two CAD Lab Computers  
$4,000  
CAD software programs are resource heavy programs and require powerful computers to run without lag or errors. The current instructor station computers in our CAD labs are not able to execute the operations of the current programs without significant lag.
2. USB Port Hubs

Twenty desktop USB hubs in our classrooms to provide easier access when plugging in flash drives. Most of our part-time faculty, and some full time faculty, use thumb drives during their lecture and laboratory session, and these hubs would provide a more convenient way of plugging thumb drives into the classroom computers. It would also help to remind the faculty member to remove the drive when their class was complete.

b. Biology

1. **MakerBot 3D Printer with Flexible Matrix for Organ Printing**
   
   Person Responsible: Maggie Emblom-Callahan, Lead Assistant Dean
   
   Planned implementation date: 7/1/16
   
   Planned Completion date: 6/30/17
   
   Expected source of funds: Campus Tech Plan

   The 3D printer with a flexible matrix can be directly incorporated into Anatomy and Physiology labs. Students would be able to build and visualize organs and organ components as well as comparing similar organs. The flexible matrix is more in keeping with the flex present in organs.

c. Computer Science

Person Responsible: Emilia Butu (AD of Computer Science)

Planned implementation date: 7/1/16

Planned Completion date: 6/30/17

Expected source of funds: ETF

**Programming Robot**

Students have done programming as part of Computer Science program for many years, and it would be a good time to anchor their skills into a growing field that has good perspective for the future: robotics. Having the opportunity to do hands on programming on an actual robot, and build applications for it can represent an important boost for the Computer Science program in our campus, and it would open new perspectives for our students, from multiple perspectives.

There are several companies that sell robots to colleges and universities, and robotics in education becomes a discipline by itself. This proposal has as object the acquisition of a programmable robot that can be used in all programming classes offered by Computer Science program: CSC 110, CSC 200, CSC 201, and CSC 202. The idea would be to purchase several kind of robots, and evaluate their use in class, but we can start by purchasing one robot each year, and start building our portfolio of applications. The outcome of this investment would be:

- Improve teaching in programming classes by adding topics in programmable robots, and having students doing projects on actual projects.
- Create active robotics clubs on campus, and collaborate with similar clubs in other universities
- Emulate the interest among faculty members, and develop new curriculum regarding robotics, or use of programming in artificial intelligence.
It would be interesting to purchase more than one type of robot, but if funds are limited, as stated before, we can start with one or two. Here are some alternatives.

<table>
<thead>
<tr>
<th>Name of robot</th>
<th>Manufact.</th>
<th>Web site</th>
<th>Price</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robokind ZENO</td>
<td>Robokind</td>
<td><a href="http://www.robokindrobots.com">www.robokindrobots.com</a></td>
<td>$2700</td>
<td>Can be used in applications with Math and psychology departments</td>
</tr>
<tr>
<td>RobotLab BOX</td>
<td>RobotsLab</td>
<td><a href="http://www.robotsLab.com">www.robotsLab.com</a></td>
<td>$3999</td>
<td>Can be also used in developmental Math and pre-calculus</td>
</tr>
<tr>
<td>Nao Evolution Robot V5</td>
<td>RobotsLab</td>
<td><a href="http://www.robotsLab.com">www.robotsLab.com</a></td>
<td>$9500</td>
<td>Leading humanoid robot used in education</td>
</tr>
</tbody>
</table>

**e. Engineering**

| Person Responsible: Mike Ghorbanian, AD of Engineering |
| Planned implementation date: 7/1/16 |
| Planned Completion date: 6/30/17 |
| Expected source of funds: Campus Tech Plan |

**a. Instructor Station Computers for EGR Labs: AE 204 & AE 206 (2 total)** $4,000

These machines require video and 3D demonstrations capabilities for instruction that the rest of the machines in the room do not require, so they need much better processor/ bus, RAM and video card. Traditionally these machines have been updated with the rest of the PCs in the room every 4 years and that is not adequate.

**2. P-Series 36x24 Laser Cutter (Engineering Labs)** $7,995

Alexandria Campus Engineering labs strive the offer the best experience to students. As the technology evolves, adding cutting edge technology is very much part of teaching and learning. The Engineering Labs are in need of a Laser Cutter that critical for large cutting or engraving jobs. This is a large format laser that provides the tools needed to create 2D and 3D models.

**3. 3D Printer (Engineering Labs)** $3,100

When most people think of 3D modeling, they think of CAD. With the printer students will be offered an opportunity to experience first-hand the 3D models that have created in CAD. Students will have capability to print floor plans, building designs that are very critical for visualization.

**f. Mathematics**

| Person Responsible: NV Fitton (AD of Mathematics) |
| Planned implementation date: 7/1/16 |
| Planned Completion date: 6/30/17 |
| Expected source of funds: Campus Tech Plan |

**1. TI-84 graphing calculators** $2,070

Two packs of ten TI-84 graphing calculators, one to provide calculators for faculty and another to keep in the library for students to borrow.

**2. TI-89 graphing calculators** $1,370

Ten TI-89 graphing calculators, five for faculty use and five to keep in the library for students to borrow.
3. **Wacom Intuos Art Pen & Touch Medium Tablet CTH690AK**
   
   Two pen tablets for the use of instructors making recorded lectures.

   

5) **SPS Division Equipment Needs**

   Person Responsible: Dr. Ivy Beringer (Acting Dean, S&PS)
   
   Planned Implementation date: 7/1/16
   
   Planned completion date: 6/30/17
   
   Expected Source of Funds: Campus Tech Plan and ETF

   **a. IT:**

   Person Responsible: Dr. Ivy Beringer (Acting Dean, S&PS)
   
   Planned Implementation date: 7/1/16
   
   Planned completion date: 6/30/17
   
   Expected Source of Funds: Campus Tech Plan and ETF

   **i. iMac (14)**

   We have a mixture of Windows/Dell (14) and MAC machines (15) in room 446. We were planning to convert it to a MAC lab, but there was not enough funds two years ago for the whole lab. Now windows machines are scheduled for replacement next year. We can combine the cost of replacement of Windows machines with additional X and replace Windows machines with matching MACs computers to those 15 MACs that are already in room 446.

   **ii. DELL COMPUTERS**

   The following equipment is needed for our new Cisco Lab at Room 417 to teach ITN 154, ITN 155, ITN 156 and ITN 157. In addition, this new Cisco Lab will be capable of holding many other ITN, ITE and ITP courses since it will have Internet Access.

   DELL i7, 8GB RAM, 500MB of STORAGE (H/D) with 21 inches monitors (20) **$24,000**
   
   CATALYST SWITCHES 2960 PLUS 24 10/100 + 2T/SFP LA (6) **$2,760**
   
   Cisco 941 Routers (2) **$1,140**

   **c. Apple Mac mini 3.0 GHz Desktop Computer,**

   3.0GHz Intel Core i7 Dual-Core (Haswell), 8GB of 1600 MHz LPDDR3 RAM, 1TB Fusion Drive, Intel Iris Graphics

   One unit needed for instructions related to setting up Apple Small network servers & configurations

   **d. Apple AirPort Time Capsule (3TB) (2 x $399/each)**

   Two units Needed for backup and file server for Apple computers in iMacs computer labs.

   **e. Arduino Hardware kits-two to three kits could be ordered)**

   Arduino is an open-source electronics platform intended for teaching computer hardware and software using interactive projects.

   **f. Three 50 inch monitors with wall mount (3 x $1200 each)**

   The Cybersecurity Lab at the Alexandria Campus plays a critical role in preparing students for careers as cybersecurity technicians or analysts by providing them with the necessary knowledge, skills and abilities identified in the National Initiative on Cybersecurity Education (NICE) Workforce Framework 2.0 and the National Security Agency/Department of Homeland Security criteria.

   There is a definite need to experience the cyber-attacks as they happen around the world. The purpose of the monitors will be to give visual aid to students to experience cyber-crimes as they happen in any part of the world.
b. Auto: Total $17,651
Person Responsible: Dr. Ivy Beringer (Acting Dean, S&PS)
Planned Implementation date: 7/1/16
Planned completion date: 6/30/17
Expected Source of Funds: Campus Tech Plan and ETF

i. Autel MS908P MaxiSys Pro Diag Syst w/reprograming box & VCI (1) $2,661
The AUT Dept. of the Alexandria campus is in need of the newest scan tool Autel MaxiSys MS908P. This particular piece of equipment will allow automotive instructors and students to not only communicate with the latest of domestic, Asian and European vehicle on board vehicle computers but as important will also allow students to learn in reprograming of on board vehicles micro-processors which at this time is not available to students with our current electronic diagnostic tools.

ii. On vehicle brake lathe-92/Troll/6ADPT/EDU Stand & G2X Cutting Head (1) $12,365
The AUT Dept. of the Alexandria campus is in critical need of a 2nd on vehicle brake lathe to be able to train all our students on this particular piece of equipment which has become the industry standard way of resurfacing brake rotors on later vehicles. Currently the AUT Dept. has only one of these which make it difficult to ensure every student is trained properly due to the time it takes to properly learn and correctly operate this piece of equipment without damaging it and/or the vehicle being worked on.

iii. Graphing multimeter/Snap on Vantage Ultra Industrial (1) $2,625
The AUT Dept. of the Alexandria campus is in need of one Snap on Vantage Ultra industrial Graphing Multimeter. This particular piece of equipment will allow instructors to teach automotive students basic electrical wave forms, frequencies, and duty cycles and quickly diagnose electrical faults in modern vehicles.

6. SSC Equipment Needs Total $6,465
SDV $6,465
Supervisor Responsible: Dr. Vanessa Díaz Rodríguez (Interim Dean of Students)
Planned implementation date: 8/1/16
Planned Completion date: 12/30/16
Expected Source of Funds: Campus Tech Plan and ETF

NOVAQ Kiosks for AL Campus:
- Countertop (3 total), $970 each $2,910
- 3G-4G (3 total), $1,185 each $3,555

NOVAQ will be replacing SmarterTrack as the sign-in system for students who are seeking assistance at various campus offices and departments. These include: Advising & Counseling; Admission & Records; First-Year Advising; International Student Office; Student Financial Aid; Pathways; and Veterans. This request includes funds to purchase iPad Kiosks for these offices, as well as three additional Kiosks to be placed in the Library, Engineering Building Lobby, and the new academic building lobby for a total of 14 Kiosks. Attached is a corresponding spreadsheet with two tabs and a photo of the units.
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<thead>
<tr>
<th>Project/Activity</th>
<th>Amount</th>
<th>Start Date</th>
<th>Completion Date</th>
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<td>IT Manager Support</td>
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<td>6/30/17</td>
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<td>Lab Support</td>
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<td>Refresh 25% of Windows Computers on Campus</td>
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<tr>
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<td>Software License Renewals</td>
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<td>6/30/17</td>
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<tr>
<td>Refresh 35 complete Classrooms to digital designs Age</td>
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<td>7/1/16</td>
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<tr>
<td>Remodeling Support</td>
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<td>6/30/17</td>
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<td>Ernst Center Tech Maintenance</td>
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<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>Wireless Upgrades as needed</td>
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<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>Refresh flat panels 7 yrs. or older</td>
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<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>Apple App purchases iPad cart</td>
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<tr>
<td>Supplemental Technology for classroom refresh</td>
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<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>Conference Room Technology refresh/implementation</td>
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<tr>
<td>Active Learning Spaces deployment</td>
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<td>6/30/17</td>
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<td>VTC support for hardware based solutions possible expansion of capability</td>
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<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>Video reinforcement in existing classroom spaces</td>
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<td>7/1/16</td>
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<td>Misc. network wiring, new drops, maintenance</td>
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<td>6/30/17</td>
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<td>Audio modifications classroom</td>
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<td>Library media center maintenance</td>
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<td>6/30/17</td>
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<td>Library self-check-out kiosk for materials and license renewals</td>
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<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>Touch Monitors for classrooms and podiums</td>
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<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>10 tower based PCs for refreshing of controllers for routers, sign design etc.</td>
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<td>7/1/16</td>
<td>6/30/17</td>
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<td>Replacement classroom technology furniture or podium furniture</td>
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<td>6/30/17</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Cost</td>
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<td>------------</td>
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<td>27</td>
<td>Video and Audio support for conferencing and lecture capture</td>
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<td>7/1/16</td>
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<td>28</td>
<td>Develop 3D printing depot (pilot)</td>
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<td>7/1/16</td>
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<td>29</td>
<td>Wireless technologies for AV connection and screen sharing</td>
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<td>7/1/16</td>
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<td>Ernst Center AV control</td>
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<td>Ernst Center Sound system</td>
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<td><strong>TOTAL</strong></td>
<td><strong>$1,696,000</strong></td>
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(Item 1 IT Manager Support) $10,000

Person Responsible: Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: Campus Tech Plan
Provide funding for various maintenance items like replacement parts, tech supplies, cables, misc. small items needing replacement etc.

**ITEM 2 LAB SUPPORT** $46,000

Person Responsible: Dr. Braddlee
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: Campus Tech Plan
Funding Supports Saturday P-14 and student hire staffing in the OCL, for evenings and weekends.

**ITEM 3 Refresh 25% Windows Computers** $500,000

Person Responsible: Bruce Ghofrany
Planned implementation date: 12/1/16
Planned Completion date: 12/30/17
Expected Source of Funds: College Tech Plan
Purchase and install Windows based computers with latest operating system and latest versions of production software. This will insure compliance with VCCS life-cycle requirements for computers

**ITEM 4 CA 302 Technology Refresh** $100,000

Person Responsible: Bruce Ghofrany/Wayne Ledford
Planned implementation date: 12/1/16
Planned Completion date: 12/30/17
Expected Source of Funds: College Central Funding/ Campus Tech Plan
Provide funds for the technology refresh for CA 302. The current capabilities far exceed the base campus AV design. Current capabilities include: Enhanced Audio, 10,000 Lumens 3 lamp projector. Fiber connected AV system. VTC capability.

**ITEM 5 Bulbs for projects in classrooms** $8,000

Person Responsible: Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: College Tech Plan
Bulb/lamp costs for projectors have reached a point where the overall costs require submission as a specific line item.

Item 6 Replacement Screens as part of Tech refresh (35) $35,000
Person Responsible: Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: Campus Tech Plan
Provide funds for replacement screens as part of Tech refresh in classrooms. Will provide screens with 16:10 aspect ratio and high contrast finish.

ITEM 7 SOFTWARE LICENSE RENEWALS $5000
Person Responsible: Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: College Tech Plan/ Campus Tech Plan
This will fund software renewals not covered by the academic renewal process. This will include things like School Vue labs and FSRC, Drive Shield and Deep-Freeze.

ITEM 8 UPGRADE 35 CLASSROOMS $420,000
Person Responsible: Bruce Ghofrany/Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: College Tech Plan
35 classrooms are due for updates due to age, and they remain analog systems within the spaces. This includes projector, document camera, amplification and control will be refreshed.

ITEM 9 SET ASIDE FOR REMODELING Support $5000
Person Responsible: Bruce Ghofrany
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: Campus Tech Plan
This is a set aside to provide updates in classrooms as part of the remodeling process. This usually involves supplemental network drops or cabling for presentation systems as rooms are remodeled. This funding is not for new classroom systems as much as filling in gaps as needs arise after remodeling projects.

ITEM 10 ERNST CENTER MAINTENANCE $7000
Person Responsible: Bruce Ghofrany/ Kevin Sheehan/ Lawson Earl
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: College Tech Plan
These funds will provide resources for small IT repairs and technology replacements as needed in the Ernst Center for seminar rooms, theatre and presidents dining room.
Item 11 Wireless Upgrades for academic buildings, library student lounges $ 5000
Person Responsible: Bruce Ghofrany
Planned implementation date: 7-1-16
Planned Completion date: 6-30-17
Expected Source of Funds: Technology Plan
Brief Narrative: Funds will provide for updates to the wireless network. This will supplement the work being done as part of the college Wi-Fi expansion. Focus will on supporting areas of student or faculty convenience.

Item 12 Refresh flat panels > 7 years old. $7500
Person Responsible: Bruce Ghofrany
Planned implementation date: 9-1-16
Planned Completion date: 9-30-17
Expected Source of Funds: Technology Plan
Brief Narrative: Funds will provide for replacement of flat panels on campus in excess of our centrally funded allotment. These panels are currently in classrooms, or part of emergency notification system.

Item 13 Apple App purchases for iPad cart $3500
Person Responsible: Bruce Ghofrany/ Wayne Ledford
Planned implementation date: 7-1-16
Planned Completion date: 7-30-17
Expected Source of Funds: Technology Plan
Brief Narrative: Funds will provide for acquisition of Apple Apps requested by faculty for use in the classroom. These Apps will be loaded on the 3 campus iPad cart iPads. Apps will be purchased through the VPP so the campus will retain ownership of all Apps.

ITEM 14 Provide Supplemental AV Technology for classrooms $100,000
Person Responsible: Bruce Ghofrany/ Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 5/30/17
Expected Source of Funds: Campus Tech Plan
Annandale campus has a number of small auditoriums like CN 117, CS 129 etc. currently serviced by a single projector. Given the size of the spaces and the number of students, faculty and student feedback is that a single projector system is insufficient for these spaces. The funding will support a new digital multi-display design and audio re-enforcement. Spaces like this also include many of the science labs in CS bldg., and the mezzanine of CT building.

Item 15 Conference room Technology refresh/ implementation $40,000
Person Responsible Wayne Ledford/Rizwan Rahman
Planned implementation date 7-1-2016
Planned Completion date 6-31-2017
Expected Source of Funds Campus Technology Plan
Brief Narrative
This funding will allow for refreshing technology in conference rooms. This will allow for transition
to digital technology of aged conference room systems. CS, CG, CN have conference spaces in need
of refreshed technology. Campus operations will determine the priority and order of the refresh.

Item 16 Active learning spaces $40,000
Person Responsible: Wayne Ledford/ Dr. Braddlee
Planned implementation date 7-1-2016
Planned Completion date 12-30-2017
Expected Source of Funds Campus Technology Plan

Brief Narrative
This funding will support the development and deployment of an active learning spaces on the
Annandale campus. The funding will provide technology only associated with the classroom of the
future and the renovations within an existing campus space. This funding will support technology for
collaboration as well as multiple displays and greater access and student participation.

Item 17 Podium maintenance items $21000
Person Responsible: Wayne Ledford/ Bruce Ghofrany
Planned implementation date 7-1-2016
Planned Completion date 5-30-2017
Expected Source of Funds Campus Technology Plan

Brief Narrative
Funding will provide for repair, maintenance and acquisition of podiums for faculty presentation and
storing of classroom technology. This funding will provide for maintenance items like replacements
for broken shelf brackets as well as support the purchase of new podiums. Recent classroom
additions on Annandale campus have consumed surplus podiums for classrooms. Items like monitor
stands and rack shelves are also included.

Item 18 VTC support for Cisco solutions $25000
Person Responsible: Wayne Ledford/ Bruce Ghofrany
Planned implementation date 7-1-2016
Planned Completion date 5-30-2017
Expected Source of Funds Technology Plan

Brief Narrative
Funding will provide support for hardware based Video Teleconferencing System. As reorganization
continues, there will likely to be increased demand for VTC as faculty across multiple campuses will
organize into college divisions.

Item 19 Video reinforcement for existing digital spaces $20000
Person Responsible: Wayne Ledford/ Dr. Braddlee/Bruce Ghofrany
Planned implementation date 7-1-2016
Planned Completion date 7-30-2017
Expected Source of Funds Technology Plan

Brief Narrative
Funding will provide for acquisition and installation of flat panels into 45 student plus classrooms.
The monitors will provide video reinforcement for ‘back of the room’ students. The deployments
will be focused on 60+ person spaces with unique characteristics like flat floors and difficult viewing angles.

Item 20 Misc. network wiring maintenance $12000

Person Responsible: Wayne Ledford/ Bruce Ghofrany
Planned implementation date 7-1-2016
Planned Completion date 5-30-2017
Expected Source of Funds Technology Plan
Brief Narrative
Funding will provide misc. network drops as the need arises. Also provide for the final remaining pocket of Type II cable on second floor CG building.

Item 21 Audio enhancements classrooms $20,000

Person Responsible: Wayne Ledford/ Bruce Ghofrany
Planned implementation date 7-1-2016
Planned Completion date 5-30-2017
Expected Source of Funds Technology Plan
Brief Narrative
Funding will provide for multiple ceiling mounted speakers, installation and cable. In this way, program audio in classes will no longer be limited to two front of the classroom speakers. This will allow for more equal audio volumes, and pave the way for portable voice reinforcement in larger classrooms.

Item 22 Media Center Maintenance $3000

Person Responsible: Dian Aram
Planned implementation date 7-1-2016
Planned Completion date 5-30-2017
Expected Source of Funds Technology Plan
Brief Narrative
Funding will provide support for the media center in the library. Items will include replacement still cameras, movie cameras, and other media processing tools used by students in the media center in the library.

Item 23 Self-Check-out Kiosk $15000

Person Responsible: Dr. Braddlee
Planned implementation date 7-1-2016
Planned Completion date 12-30-17
Expected Source of Funds Technology Plan
Brief Narrative
Funding will provide for the purchase of a self-check-out kiosk software license and system maintenance. The system will interface with the current library management software, allowing staff to focus more on supporting student’s research needs.

Item 24 touch Monitors for classroom and podiums $10,000

Person Responsible: Bruce Ghofrany/Wayne Ledford
Planned implementation date 7-1-2015
Planned Completion date 12-30-16  
Expected Source of Funds  Technology Plan  
Brief Narrative  
Funding will provide for the purchase of touch monitors to support the teaching of touch based applications. This will continue to support the teaching of Windows 8 in the classrooms as well as support the pilots for touch based AutoCAD applications.

Item 25 Purchase 10 Tower PCs $20,000  
Person Responsible: Bruce Ghofrany  
Planned implementation date 7-1-2016  
Planned Completion date 12-30-17  
Expected Source of Funds  Campus Technology Plan  
Brief Narrative  
Funding will provide for the purchase of 10 Tower form factor PCs. These PCs act as controllers for lathes, sign machines etc. The PCs will replace old hardware currently in place which has now exceeded its viable life cycle.

Item 26 Technology capable Furniture $30,000  
Person Responsible: Bruce Ghofrany/ Dr. Braddlee/ Wayne Ledford  
Planned implementation date 7-1-2016  
Planned Completion date 12-30-17  
Expected Source of Funds  Campus Technology Plan  
Brief Narrative  
Recent classroom review revealed some damaged technology furniture in the classrooms. These include adjustable faculty tables in CA where the ratchet is broken, Computer tables with bent brackets, broken cable management.

Item 27 Support for software video solutions $8,000  
Person Responsible: Wayne Ledford  
Planned implementation date 7-1-2016  
Planned Completion date 12-30-17  
Expected Source of Funds  Campus Technology Plan  
Brief Narrative  
Funding will provide for acquisition and installation of audio and video source inputs for use with Panopto lecture capture or software video conferencing. The upgrades will give faculty greater control over video input and will provide for higher quality audio input for lectures captured in classrooms.

Item 28 develop a 3-D printing depot $10,000  
Person Responsible: Wayne Ledford/ Dr. Braddlee/Hector Revollo  
Planned implementation date 7-1-2016  
Planned Completion date 7-30-2017  
Expected Source of Funds  Technology Plan  
Brief Narrative  
Funding will provide support for a 3-D printing pilot. It will provide for the acquisition of items required to configure a 3-D printing depot. Acquisitions will likely include necessary hardware and software. The printing depot will be a manned facility where a 3-D printing subject matter expert
will manage 3-D printer output.

Item 29 Wireless Technologies for AV $15,000
Person Responsible: Wayne Ledford/ Bruce Ghofrany
Planned implementation date 7-1-2016
Planned Completion date 7-30-2017
Expected Source of Funds Campus Technology Plan
Brief Narrative
Provide funding for the purchase of wireless technologies to allow for screen-casting or AV system sharing between students in the class and the classroom AV system. This will also provide funding for wireless technology to allow PC to connect to AV system without cables. This is necessary in locations like Dance Studios and Auditoriums where connection cables become hazardous or undesirable.

Item 30 Ernst Center AV control room $55,000
Person Responsible: Rizwan Rahman/Kevin Sheehan
Planned implementation date 7-1-2016
Planned Completion date 7-30-2017
Expected Source of Funds Other sources
Brief Narrative
Six new laptops and charging cart to charge and store laptops. These will be used by outside users to engage Ernst center technology while renting or using the facility. The laptops will replace the existing Design, furnish, and install new sound system for the forum with all equipment and control stations located in the A/V room in the rear of the forum, included in this project would be the necessary equipment to provide audio and video links to/from the theater and forum (this would allow us to use the forum as overflow seating for the theater).

Item 31 Ernst Center Theatre Sound System $100,000
Person Responsible: Rizwan Rahman/Kevin Sheehan
Planned implementation date 7-1-2016
Planned Completion date 7-30-2017
Expected Source of Funds Other sources
Brief Narrative
Overhaul theater sound system. Furnish and install two sets of JBL line arrays and subwoofer cabinets. Design and furnish front of house sound rack with 12 wireless microphone receivers, mixer, dual CD player, equalizer, compressor, etc. Redesign and rewire amplifier rack including new amplifiers and distribution devices

College Technology Plan - Loudoun Campus FY2016-17

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<thead>
<tr>
<th>Project/Activity</th>
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<th>Completion Date</th>
<th>Actual Spending (Tech Plan funds only)</th>
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<td>Classroom Upgrades differential</td>
<td>$35,000.00</td>
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<td>06/30/2017</td>
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<td>6</td>
<td>APC UPS Replacement x 20</td>
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<td>07/01/2016</td>
<td>06/30/2017</td>
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<tr>
<td>7</td>
<td>3 Collaborative Learning Areas to Upgrade Study Group Areas in LC 1st floor</td>
<td>$45,000.00</td>
<td>07/01/2016</td>
<td>06/30/2017</td>
</tr>
<tr>
<td>8</td>
<td>Upgrade Monitors x 30</td>
<td>$12,000.00</td>
<td>01/01/2017</td>
<td>06/30/2017</td>
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<tr>
<td>9</td>
<td>Upgrade RAM x 30</td>
<td>$3,270.00</td>
<td>01/01/2017</td>
<td>06/30/2017</td>
</tr>
<tr>
<td>10</td>
<td>40 licenses for Deep Freeze for iMacs</td>
<td>$2,500.00</td>
<td>07/01/2016</td>
<td>11/30/2016</td>
</tr>
<tr>
<td>11</td>
<td>Upgrade Video Cards x 30</td>
<td>$12,000.00</td>
<td>07/01/2016</td>
<td>12/31/2016</td>
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<tr>
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<td>13</td>
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<td>14</td>
<td>Replace 40 original iPads</td>
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<td>08/31/2016</td>
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<td>15</td>
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<td>18</td>
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<td>Amount</td>
<td>Start Date</td>
<td>End Date</td>
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<td>------------</td>
<td>------------</td>
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<td>23</td>
<td>Video Wall</td>
<td>$45,000.00</td>
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<td>02/28/2017</td>
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<td>Hard Drives</td>
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<td>Software Licensing and Apps</td>
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<td>06/30/2016</td>
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<td><strong>$672,880.00</strong></td>
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<td>Allocated FY15-16</td>
<td><strong>$197,600.00</strong></td>
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1: SchoolVue Licenses ($8,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 08/30/16
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Annual license fee the Reston Center, Signal Hill, and the Loudoun campus.

2: Lab Support ($122,640)
### Campus Lab Support 2016-17

<table>
<thead>
<tr>
<th></th>
<th>Total Hrs. Needed per week</th>
<th>Rate</th>
<th>Total per week</th>
<th>Total per year</th>
<th>Hours open</th>
<th>Charge of Funds</th>
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<td><strong>PC Lab</strong></td>
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<td>25</td>
<td>$17.00</td>
<td>$20,400</td>
<td>Mon-Thu 4:30pm-10pm, Sat 8-4pm, Sun 1-4pm</td>
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<td>Weekday, Nights and Weekends</td>
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<td></td>
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<td><strong>Mac Lab</strong></td>
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<td>$18.00</td>
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<td>Sat &amp; Sun 10am-2pm</td>
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<td>Weekends</td>
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<tr>
<td><strong>Reston Center</strong></td>
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<td>25</td>
<td>$17.00</td>
<td>$20,400</td>
<td>R1: Mon-Thu 5-10pm, R2: Wed 5-10pm, Fri 5-9pm, Sat 9-3pm</td>
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<tr>
<td>Nights, Early Morning and Weekends,</td>
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<td></td>
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<tr>
<td><strong>IT support</strong></td>
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<td>80</td>
<td>$17.00</td>
<td>$65,280</td>
<td>Mon-Thu 9am-10pm</td>
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<td></td>
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<tr>
<td><strong>Signal Hill</strong></td>
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<td>15</td>
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<td>$12,240</td>
<td>Mon – Thu 9am-10pm</td>
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<tr>
<td>Weekday, Nights and Weekends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$122,640.00</td>
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</tbody>
</table>

#### 3: Relocate and Replace Weather Station to LS ($24,570)

Person Responsible: Charles Johnson & Randy Fournier LTR  
Planned Implementation Date: 07/01/16  
Planned Completion Date: 11/30/16  
Expected Source of Funds: Tech Plan  
Brief narrative/explanation/description: The weather station is used by a couple of instructors in the Science Building. The weather station has a display that currently is in a locked closet and can be put on display close to a classroom as a teaching tool.

#### 4: New Kiosk backs x 16 ($1,500)

Person Responsible: Charles Johnson & Randy Fournier LTR  
Planned Implementation Date: 07/01/16  
Planned Completion Date: 11/30/16  
Expected Source of Funds: Tech Plan  
Brief narrative/explanation/description: Purchase of 16 New Kiosk backs for kiosks purchased in...
2015-16FY

5: Classroom Upgrades differential ($35,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Cover any expense not part of standard equipment.

6: APC UPS Replacement x 6 ($15,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Purchase of 6 New APC UPC Battery Backups for Communications Closets throughout the campus that have reach more than 4 years old.

7: Collaborative Learning Areas to Upgrade Study Group Areas in LC ($45,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Data from student surveys indicate a need for more collaborative learning spaces at the Loudoun Campus. Collaborative workspaces support student engagement and student-led learning. Allow students to access and share information by allowing all participants to contribute their ideas – equally, quickly and seamlessly.

8: Upgrade Monitors x 30 ($12,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 01/01/17
Planned Completion Date: 06/01/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Upgrade monitors in areas that require larger format motions.

9: Upgrade RAM x 30 ($3,270)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 01/01/17
Planned Completion Date: 06/01/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Upgrade RAM on systems that need additional memory due to programs that require additional ram.

10: 40 Licenses for Deep Freeze for iMacs ($2,500)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 11/30/16
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Deep Freeze will be installed by IT Staff on iMacs in all Mac labs to keep the desired software configuration the same by rebooting and thus eliminating unwanted changes made by users.

11: Upgrade Video Cards x 30 ($12,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 12/31/16
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Upgrade video cards.

12: Upgrade Mac lab x 16 ($48,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 03/03/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Upgrade MACs that need replacing.

13: Network Extron Control Systems ($15,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/01/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Upgrade Extron Control equipment in rooms requesting dual display.

14: Replace 40 original iPads purchased FY2010 ($20,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 08/31/16
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Purchase 40 Apple iPad Air 3 for 2 older iPad carts.

15: IT Manager Support ($15,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description:
- Repair of all campus computer workstations, networked printers, VCR/DVD combo, keyboards, mice, external storage, projectors, and scanners. Replacement of all projector bulbs and a surplus so bulbs can be replaced immediately.
- Replacement of printer cartridges for faculty and adjunct networked printers at all three
sites.

- Replace color cartridges for plotter.
- This budget will specifically cover repair for the computers that are currently cycling out of warranty.
- Miscellaneous Network installs.

16: Audio Visual Support ($12,500)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Maintenance and supply items to support classroom instructional systems: Podiums, cameras, LCD lamps, VGA/audio/video cabling, and necessary system repairs for out of warranty equipment.

17: Technology Training & Development Staff ($12,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Training funds for Windows 8, Programming Extron equipment and Macintosh support classes.

18: Smart SP518 Podiums x 10 ($20,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 12/31/16
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: In the event a podium fails and must be returned to the manufacture for service, an adequate supply of podiums will be on hand for replacement.

19: Replace Misc. Projectors ($12,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 01/01/17
Planned Completion Date: 03/31/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: In the event a projector fails and must be returned to the manufacture for service, an adequate supply of projectors will be on hand for replacement.

20: Replace DMP LCDs ($20,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 12/31/16
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Replace old LCDs in LS & LW.
21: Charging Stations ($8,300)
Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 11/30/16
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: With the increase in the campus population using portable devices for classroom and work related communications, this will provide a means to assist those that need to charge their devices.

22: Upgrade Communication Closets ($50,000)
Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 11/30/16
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Patch panels need reorganizing in older communication rooms in LR to clean up the sporadic panels. This has caused a disarray of wiring.

23: Video Wall ($45,000)
Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 11/01/16
Planned Completion Date: 02/28/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Alternative to projector and drop down screen currently in large lecture classrooms.

24: Replace 3 Projection Screens ($68,000)
Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 03/31/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: A number of projection screens have various degrees of damage. This will allow for the replacement of a few screens each year.

25: Replacement Printers ($2,000)
Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: A number of printers are ageing and need replacing. This will allow for the replacement of printers each year.

26: Replacement Patch Cable ($5,000)
Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Funding will be used to purchase additional patch cables for networking needs.

27: Wireless Access Points ($10,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Funding will be used to purchase additional Wireless Access Points for replacement of faulty or new locations.

28: Hard Drives ($5,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: College Technology Plan Funding will be used to purchase additional hard drives for PCs.

29: Software Licenses and Apps ($5,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Provide funding for software license renewal not eligible for educational funding. For example, Drive-shield. Also provide funding for MAC APPs for replacement of traditionally licensed software.

30: Scanner Replacement ($3,600)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: A number of printers are ageing and need replacing. This will allow for the replacement of printers each year.

31: Flash Drives ($1,000)

Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Funding will be used to purchase flash drives for Faculty and Staff portable files.

32: Hard Drive Duplicator ($14,000)
Person Responsible: Charles Johnson & Randy Fournier LTR
Planned Implementation Date: 07/01/16
Planned Completion Date: 06/30/17
Expected Source of Funds: Tech Plan
Brief narrative/explanation/description: Funding will be used to purchase Hard Drive Duplicator to re-image hard drives.

### 2016-2017 Campus Technology Plan
CAMPUS NAME - MANASSAS

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Amount</th>
<th>Start Date</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 IT Manager Support</td>
<td>$ 25,000</td>
<td>7/1/16</td>
<td>6/1/17</td>
</tr>
<tr>
<td>2 Lab Support</td>
<td>$ 56,000</td>
<td>7/1/16</td>
<td>6/15/17</td>
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<tr>
<td>3 Classroom technology upgrades</td>
<td>$ 30,000</td>
<td>7/1/16</td>
<td>2/28/17</td>
</tr>
<tr>
<td>4 Classroom lecterns</td>
<td>$ 24,000</td>
<td>7/1/16</td>
<td>2/28/17</td>
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<tr>
<td>5 Steelcase or similar technology in the library</td>
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<td>7/1/16</td>
<td>2/28/17</td>
</tr>
<tr>
<td>6 Campus/Classroom cable upgrades</td>
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<td>7/1/16</td>
<td>2/28/17</td>
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<td>7 Laser Jet Printers</td>
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<td>12/30/17</td>
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<tr>
<td>8 Classroom/Theater projector bulbs</td>
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<td>9 Hard drives</td>
<td>$ 5,000</td>
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<tr>
<td>10 SchoolVue Software</td>
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<td>11 Drive-shield Software</td>
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<tr>
<td>13 RegisterBlast</td>
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<tr>
<td><strong>TOTAL</strong></td>
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</table>

### NARRATIVE

1. **IT Manager Support** $25,000
   Person Responsible: Lynn Bowers

2. **LAB SUPPORT** $56,000
   Person Responsible: Lynn Bowers
   Mon-Thurs/8:00 AM-9:30 PM, Fri 8:00AM -5:00 PM, Sat 8:00 AM - 4:30 PM
   P-14’s provide assistance to the open computer lab, as well as other computer labs, and assist the campus tech staff on-and off campus. The individuals are aware that the hours of support are flexible. They work evenings and Saturdays when required.
   Planned implementation date: 7/1/16
   Planned Completion date: 6/15/17
   Expected Source of Funds: College Technology Plan
3. **Classroom technology upgrades** $30,000
   Person Responsible: Lynn Bowers
   Planned implementation date: 7/1/16
   Planned Completion date: 2/28/2017
   Instructional delivery will be enhanced and students will benefit from leading edge technology in the classrooms.
   Expected Source of Funds: College Technology Plan

4. **Classroom Lecterns** $24,000
   Person Responsible: Lynn Bowers
   Planned implementation date: 7/1/16
   Planned Completion date: 2/28/2017
   New lecterns will provide the instructor with more space, and accommodate the technology that’s installed in the classrooms.
   Expected Source of Funds: College Technology Plan

5. **Steelcase or Similar Technology in the Library** $13,000
   Person Responsible: Lynn Bowers
   Planned implementation date: 7/1/16
   Planned Completion date: 2/28/2017
   Requested funding will connect users with technology by providing active learning collaboration technology.
   Expected Source of Funds: College Technology Plan

6. **Classroom Cable Upgrades** $10,000
   Person Responsible: Lynn Bowers
   Planned implementation date: 7/1/16
   Planned Completion date: 2/28/2017
   Several classrooms have old and failing data cables. Other classrooms need to have the data cables moved to accommodate the re-configuration of the classrooms. Some offices need to have additional data and power cables installed or upgraded.
   Expected Source of Funds: College Technology Plan

7. **Laser jet printers** $7,000
   Person Responsible: Lynn Bowers
   Planned implementation date: 7/1/16
   Planned Completion date: 2/28/2017
   The proposed funding will upgrade printers that are at least five years old.
   Expected Source of Funds: College Technology Plan

8. **Classroom projector bulbs** $3,000
   Person Responsible: Lynn Bowers
   Planned implementation date: 7/1/16
   Planned Completion date: 2/28/2017
   Replacement projector bulbs are necessary to support the mounted projectors installed in the classrooms, computer labs, and conference rooms.
   Expected Source of Funds: College Technology Plan
9. **Hard drives** $5,000
Person Responsible: Lynn Bowers
Planned implementation date: 7/1/16
Planned Completion date: 2/28/2017
Requested funding will be used to purchase additional hard drives for PC’s.
Expected Source of Funds: College Technology Plan

10. **SchoolVue Software (Renewal)** $900
Person Responsible: Lynn Bowers
Planned implementation date: 7/1/16
Planned Completion date: 2/28/2017
Requested funding will be used to purchase SchoolVue management software to assist in classroom management, monitoring, and instruction.
Expected Source of Funds: College Technology Plan

11. **Drive-shield Software** $2,500
Person Responsible: Lynn Bowers
Planned implementation date: 7/1/16
Planned Completion date: 2/28/2017
Requested funding will be used to maintain computer integrity so that changes made to a computer are removed upon system restart.
Expected Source of Funds: College Technology Plan

3-D Monitors (2) $26,000
Person Responsible: Lynn Bowers
Planned implementation date: 7/1/16
Planned Completion date: 2/28/2017
Requested funding funding will connect users with technology by providing active learning through collaboration. We will install the devices in locations that are student accessible.
Expected Source of Funds: College Technology Plan

10. **RegisterBlast Software (Renewal)** $2,000
Person Responsible: Lynn Bowers
Planned implementation date: 7/1/16
Planned Completion date: 2/28/2017
Requested funding will be used to purchase RegisterBlast management software to assist in testing center reservations and data collection.
Expected Source of Funds: College Technology Plan
### Medical Education Campus
### FY 17 Technology Plan

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Amount</th>
<th>Start Date</th>
<th>Completion Date</th>
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<tbody>
<tr>
<td>1 IT Manager Support</td>
<td>10000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>2 Lab Support</td>
<td>20000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>3 Upgrade 7 classes to include digital presentation, projector doc cam</td>
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<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>4 Computer upgrades</td>
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<td>5 iPad Learning Lab 30 iPads</td>
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<tr>
<td>7 Misc. Cabling Needs</td>
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<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>8 Replacement Screens</td>
<td>5000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>9 Software Licensing and Apps</td>
<td>4000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>10 Update library study rooms/ team rooms</td>
<td>20000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>11 Screen sharing technologies</td>
<td>5000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>12 Wireless AV connection technologies</td>
<td>3500</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>13 Wi-Fi Upgrades as needed</td>
<td>4000</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>14 Misc. lab and clinic technology support items</td>
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<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>15 Flat panel displays</td>
<td>5000</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<td>16 Scanners for campus, for use with Image Now and OCL</td>
<td>$5100</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>17 Headphones for various uses</td>
<td>$500</td>
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<td>18 MACbooks for Student Use, managed by LTR</td>
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<td>6/30/17</td>
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<tr>
<td>19 Supplemental technology for classrooms</td>
<td>25000</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>20 Update collaboration technology He 355</td>
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<td>6/30/17</td>
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<tr>
<td>21 Podium maintenance items</td>
<td>4500</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>22 iPads for counselors to use with new queueing application</td>
<td>3500</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>23 Video wall Forum</td>
<td>70000</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>24 UPS for testing Center</td>
<td>2500</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>25 24” monitors for testing</td>
<td>750</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>26 iPad Air for student use</td>
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<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>27 iPad Air for LTR staff use</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>$486,850</td>
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</tbody>
</table>

(Item 1 IT Manager Support) $ (10,000)
Person Responsible: Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: Campus Tech Plan
Provide funding for various maintenance items like bulbs, misc. wiring, cables, WIFI access points, and trial/pilot technologies.

Item 2 Lab Support $20,000
Person Responsible: Wayne Ledford/Ruth Stanton
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: Campus Tech Plan
Provide weekend support for Lab

(Item 3 Upgrade 15 classrooms) $84,000
Person Responsible: Lyle Fanelli
Planned implementation date: 7/1/16
Planned Completion date: 5/30/17
Expected Source of Funds: College Tech Plan/Central Funding
Provide upgrade classrooms to include control, cabling transition to digital from analog, document cameras and projectors

ITEM 4 Computer Upgrades $140,000
Person Responsible: Wayne Ledford
Planned implementation date: 9/1/15
Planned Completion date: 12/30/16
Expected Source of Funds: College Tech Plan/ Central Funding
Provide funds to replace computers as part of the college refresh. Will refresh approximately 25% of all college computers

ITEM 5 IPAD LEARNING LAB $22000.00
Person Responsible: Wayne Ledford
Planned implementation date: 10/1/16
Planned Completion date: 10/30/17
Expected Source of Funds: Campus Tech Plan
Provide funding for 1 additional iPad Lab for the MEC to be used by students in the classroom, labs or Sim Centers. Faculty can check out the cart for use with students in the classroom only. Utilization of the iPads has increased, and the app requests from faculty have grown significantly.

ITEM 7 Misc. Cabling Needs $3,500
Person Responsible: Wayne Ledford
Planned implementation date: 10/1/16
Planned Completion date: 12/30/17
Expected Source of Funds: Campus Tech Plan
Provide funding for the infrastructure build out for additional wireless and wired drop capacity as needed.

ITEM 8 Replacement Screens $5000
Person Responsible: Wayne Ledford
Planned implementation date: 9/1/16
Planned Completion date: 5/30/17
Expected Source of Funds: Campus Tech Plan
Provide replacement projector screens for classroom projectors as classrooms are updated to digital systems, with 16:10 aspect ratio and high contract coatings.

Item 9 Software Licensing and Apps $4000
Person Responsible: Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/17
Expected Source of Funds: College Tech Plan
Provide funding for software license renewal not eligible for educational funding. For example, Drive-shield. Also provide funding for MAC APPs for replacement of traditionally licensed software in the OCL.

ITEM 10 Update library study rooms/team rooms $20,000
Person Responsible: Wayne Ledford/Ruth Stanton
Planned implementation date: 7/1/16
Planned Completion date: 3/30/17
Expected Source of Funds: Campus Tech Plan
Provide funding for the replacement and upgrade of the team technology in the 2 library study rooms. The spaces will exceed 5 years of age next year. To include: flat panel and AV control.

Item 11 Screen sharing technologies $5000
Person Responsible: Lyle Fanelli, Wayne Ledford
Planned implementation date: 12/1/16
Planned Completion date: 12/30/2017
Expected Source of Funds: Campus Tech Plan
Provide funding for additional screen sharing technologies in classrooms and conference rooms. Recent faculty technology survey had a number of requests for additional screen sharing rooms at MEC.

Item 12 Wireless AV connection technologies $3500
Person Responsible: Lyle Fanelli, Wayne Ledford
Planned implementation date: 12/1/16
Planned Completion date: 5/30/2017
Expected Source of Funds: Campus Tech Plan
Fund the purchase of wireless AV connection technologies. This will allow for greater mobility of the teaching station since it will not be tethered by AV connection cables. Power only. Primary target locations are labs like the new OTA and SIM lab.

Item 13 Upgrades to Wi-Fi as needed $4000
Person Responsible: Lyle Fanelli, Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/2017
Expected Source of Funds: Campus Tech Plan
Fund additional Wi-Fi antennae for locations needing additional Wi-Fi coverage. This will be used to expand coverage to spaces where coverage is needed after the 2014 central IT upgrades are executed.

Item 14 Misc. lab and clinic technology support items $10000
Person Responsible: Wayne Ledford, Nursing and Allied Health Deans  
Planned implementation date: 9/1/16  
Planned Completion date: 5/30/2017  
Expected Source of Funds: Campus Tech Plan  
Provide for the purchase of various technology items to help clinic and lab work flows transition to complete digital process. Specifically, items like scanners, card printers etc. to allow for the dental clinic to transition from paper records to complete electronic health records.

Item 15 Flat Panel Displays $5000  
Person Responsible: Ruth Stanton  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus Tech Plan  
Provide for funding of locations which may need flat panels for Q display or presentation of emergency notification information.

Item 16 Scanners $5100  
Person Responsible: Lyle Fanelli  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus Tech Plan  
Fund purchase of specific Fujitsu scanners required for interface with Image Now. Image Now utilization is expanding on campus, and provides for a secure mechanism of data retention. May require additional scanner purchases as campus comes to terms with existing legacy paper medical records.

Item 17 Headphones for various student uses $500  
Person Responsible: Andy Cornell, Wayne Ledford  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus Tech Plan  
Multiple requests for headphones associated with testing center, iPad use, and library use.

Item 18 Macbooks for student use $7500  
Person Responsible: Ruth Stanton, Wayne Ledford  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus Tech Plan  
Fund purchase of Macbooks for loan to students to use. This will increase the overall current MAC footprint of loaners to 7 from 2. They are very popular for use with students.

Item 19 Supplemental Technology for classrooms $25000  
Person Responsible: Lyle Fanelli, Wayne Ledford  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus Tech Plan  
This funding will provide for the purchase of items for deployment in the classroom space beyond the base design funded by central college funds. This can include: enhanced resolution projectors, overhead speakers, additional inputs for microscopes to the presentation system, multiple monitors for video reinforcement, or enhanced switching and control capability.

Item 20 Update collaboration technology $25000
Person Responsible: Lyle Fanelli, Wayne Ledford  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus Tech Plan  
This funding will provide for the purchase of updated control and switching to match the capabilities lost during the recent renovation of HE 355. Faculty requests for the return of the team monitor and sharing capability.

**Item 21 Podium Maintenance items**  
$4500  
Person Responsible: Lyle Fanelli, Wayne Ledford  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus tech Plan  
This funding will provide for the purchase of replacement items to maintain the podiums in classrooms. This items will include racks for the AV mounting, shelves for document cameras which have been broken, mounting arms for the monitors.

**Item 22 iPads for Counseling**  
$3500  
Person Responsible: Beatrice Veney, Wayne Ledford  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus Tech Plan  
This funding will provide for the purchase of iPads and cases for use by advisors in conjunction with the new queueing system NOVAQ to be implemented. This will allow for greater mobility on the part of counselors and will provide a more convenient mechanism for supporting students.

**Item 23 Video Wall for Forum**  
$70000  
Person Responsible: Wayne Ledford  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus Tech Plan  
This funding will provide for the purchase and installation of a video wall in the forum for presentations. The forum is often used for guest and student presentations. These funds will provide for 2x2 flat panels for display of presentations and college information. Also improved audio for the forum presentations as well.

**Item 24 UPS for testing center**  
$2500  
Person Responsible: Lyle Fanelli, Kathleen Odige  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/17  
Expected Source of Funds: Campus Tech Plan  
This funding will provide for the purchase of UPS to be installed in the testing center. This will allow computers of students taking tests to not lose everything during temporary power fluctuations.

**Item 25 24” Monitors for testing**  
$750  
Person Responsible: Lyle Fanelli, Kathleen Odige  
Planned implementation date: 7/1/16  
Planned Completion date: 6/30/2017  
Expected Source of Funds: Campus Tech Plan  
This funding will provide for the purchase 24” monitors for use in the testing center. These monitors will allow us to provide better services to students with disabilities.
Item 26 iPads for students $1000
Person Responsible: Beatrice Veney, Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/2017
Expected Source of Funds: Campus Tech Plan
This funding will provide for the purchase of iPads for loan by library and for use by students. This will increase the current number of iPads which are extremely popular for circulation.

Item 27 iPads for LTR staff $3500
Person Responsible: Ruth Stanton, Wayne Ledford
Planned implementation date: 7/1/16
Planned Completion date: 6/30/2017
Expected Source of Funds: Campus Tech Plan
This funding will provide for the purchase of iPads and cases for use by librarians and library staff to act as mobile support. It will also allow for service of students in place without having to relocate within the library for technology use. These will be used to mirror the mobile librarian program at AN campus.
### 2017 Campus Technology Plan
#### Woodbridge Campus

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Amount</th>
<th>Start Date</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Manager Support</td>
<td>$30,000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>Lab Support (OCL &amp; Digital Media Lab)</td>
<td>$69,000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>Recurring Licenses &amp; Maintenance</td>
<td>$14,000</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>Computer Refreshes (64 iMacs/ Desktops)</td>
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<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>Classroom or Computer Refresh Carryover</td>
<td>$120,000</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>Tutoring 3 Phase Signage and Repository Project</td>
<td>$20,000</td>
<td>7/1/16</td>
<td>6/30/17</td>
</tr>
<tr>
<td>Webcam for Lecture Capture</td>
<td>$500</td>
<td>7/1/16</td>
<td>6/30/17</td>
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<tr>
<td>Media Services AV Support</td>
<td>$700</td>
<td>7/1/16</td>
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<td>Fitness – docking station with auxiliary cable</td>
<td>$150</td>
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<tr>
<td>Film Lens case</td>
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<tr>
<td>Assistive Technology Lab Project</td>
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<td><strong>THE FOLLOWING ITEMS MAY BE FUNDED WITH ETF FUNDS</strong></td>
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<td>Tutoring Center Signage Screen</td>
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<td>Film Cinema Zoom Lens</td>
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<td>Epson 7900 Printer</td>
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<td>Canon EOS 7D Mark II DSLR Camera with 18-135mm and 70-300mm Lenses Kit</td>
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<td>Geology lab – 12 laptops</td>
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<td>Physics lab – 4 laptops</td>
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<td>Chemistry lab - deionizer</td>
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<td>AIR lab - cooling tower</td>
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<td>AIR lab - 2 heat pumps</td>
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<td>AIR lab – centrifugal pump</td>
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<td>AIR lab – NEMA magnetic contactor</td>
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<td>AIR lab – oil burner demonstrator</td>
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<td>AIR lab – heat pump and trainer</td>
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<td>Assistive technology Lab Project</td>
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<td>55&quot; TV Monitor for 402 Conf. Room</td>
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**TOTAL**

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<thead>
<tr>
<th>TECH FUNDS</th>
<th>ETF FUNDS</th>
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<tbody>
<tr>
<td>$323,520</td>
<td>$132,790</td>
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1. **Manager Support**
   (30,000)
   Person Responsible: Rachel Overbey (ITM)
   Planned implementation date: 7/1/16
   Expected Source of Funds: Tech Plan
   Planned Completion date: 06/30/2017
   Funds will provide support for various small purchase items like bulbs, network infrastructure and various materials to support classrooms, labs and offices, etc.

2. **Open Computer, Digital Media and IT LAB SUPPORT**
   (69,000)
   Person Responsible: Rachel Overbey / Kathy Bohnstedt
   Planned implementation date: 7/1/16
   Expected Source of Funds: Tech Plan
   Planned Completion date: 06/30/17
   Days/Time covered by the staff paid from the amount shown: M-T, 5-9pm; F, 1-5pm; S, 9am – 3pm

3. **Recurring Licenses & Maintenance**
   (14,000)
   Person Responsible: Rachel Overbey, Paul Loving
   Planned implementation date: 7/1/16
   Expected Source of Funds: Tech plan
   Planned Completion date: 6/30/17
   This is software that the campus is using for license renewals for software such as Direct TV, SchoolVue, and our Digital Signage yearly renewals.

4. **Computer Refresh of iMacs**
   (64,000)
   Person Responsible: Rachel Overbey, Franklin Torres
   Planned implementation date: 7/1/16
   Expected Source of Funds: Tech Plan
   Planned Completion date: 6/30/17
   The iMacs in the WAS Photo Lab and Video Lab are up for replacement, and will need to be replaced with new iMacs. AC&H is requesting additional memory for their iMacs.

5. **Classroom\Labs and Computer Refresh Carryover\Campus IT Projects**
   (120,000)
   Person Responsible: Rachel Overbey, Franklin Torres
   Planned implementation date: 7/1/16
   Expected Source of Funds: Tech Plan
   Planned Completion date: 6/30/17
   These funds will be used to cover technology costs for our classrooms and labs that are not covered centrally to upgrade our rooms from analog to digital and to upgrade rooms that are electronic classrooms to enhanced classrooms this will also include the purchase of wireless presenters, printer refreshes, and to support the campus with other projects and request that we might have that are not centrally funded.

6. **Tutoring 3 Phase Signage and Repository Project**
   (20,000)
   Person Responsible: Chris Stallings, Rachel Overbey, Paul Loving
Planned implementation date: 7/1/16
Expected Source of Funds: Tech Plan
Planned Completion date: 6/30/17

Brief Narrative: The separate phases of this project can be completed within different timeframes based on available resources but it must begin with Phase I, the digital interactive signage monitor with applicable software that will fill the needs designed by our tutoring services administrators. The integration of the interactive system with PeopleSoft and our signin process is a second step that would require the partnership of IT. The final phase of building a usable repository would also require the partnership of IT and the purchasing of iPads for the access of this information.

- Digital Interactive Signage Monitor (Qty. 1) -
- Integration of signage monitor with PeopleSoft and applicable signin software and card reader
- Creation of a database (repository) to house faculty educational materials
- iPads (Qty. 6)

7. Webcam for Lecture capture in classroom $  
   (500)
Person Responsible: Rachel Overbey, Bo Yang, Paul Loving

Planned implementation date: 7/1/16
Expected Source of Funds: Tech Plan
Planned Completion date: 6/30/17
Five Logitech HDP Pro Webcams 920 are requested for lecture capture recording in classrooms

8. Media Services AV Support $  
   (700)
Person Responsible: Rachel Overbey, David Dillon, Paul Loving
Planned implementation date: 07/1/16
Expected Source of Funds: Tech Plan
Planned Completion date: 06/30/17
Brief Narrative: To improve specifically the visual portion of video recordings for campus video recordings.

ITEM 1.
GOPRO C-mount accessory lens.
Computar 1/1.8" 4.5 – 13.2MM 5MP IR,C-Mount lens.
To provide better resolution capability with our Back Bone GoPro department camera.

ITEM 2.
GOPRO C-mount accessory lens.
Computar 2/3" 12MM 5MP ultra low distortion C-Mount lens.

9. Fitness & PED / Docking station and auxiliary cable $  
   (150)
Person Responsible: Assistant Dean Nancy Crippen, Paul Loving
Planned implementation date: 7/1/16
Expected Source of Funds: Tech Plan
Planned Completion date: 6/30/17
Brief Narrative: An audio player, which will play CDs, connect to a media player (such as an
mp3 player, iPad or iPhone), and use Bluetooth technology is necessary for fitness classes.

10. **Cinema zoom lens protective case**

Person Responsible: Chris Stallings, Paul Loving
Planned implementation date: 10/15/16 – will be testing in the 2016 fall semester and fully implement in continuous projects (as noted above in the narrative) and semester classes in January, 2017.
Expected Source of Funds: Tech Plan
Planned Completion date: 6/30/17
Brief Narrative: The protective hard case with foam interior is an obvious purchase in order to protect the cinema zoom lens so it is not housed in its shipping carton box.
- Nanuk Protective 935 Case with Foam

11. **Headsets/microphones for the Language Center (qty. 24)**

Person Responsible: Stephanie Harm, Rachel Overbey
Planned implementation date: Upon Arrival
Expected Source of Funds: Tech Plan
Planned Completion date: 06/30/17
Brief Narrative: To provide audio recording capability to the Language Lab in WC 303, all 24 machines.

12. **Assistive Technology Lab for testing and use of students with disabilities.**

Person Responsible: Mary Beth Bradley, Rachel Overbey, Paul Loving
Planned Implementation Date: 7/1/16
Expected Source of Funds: Tech Plan
Planned Completion Date: 6/30/17

The Assistive Technology Testing Lab will be used primarily for testing students with disabilities. With the increasing number of students with accommodations, it is a necessary resource for compliance with ADA law. When not used for testing, this lab will be used as a properly equipped space for students with disabilities to complete assignments, a workspace for faculty with disabilities, an overflow testing room for the Testing Center, and a training space for instructive technology.

Required Equipment:
- 10 headsets
- 4 large print keyboards for the visually impaired
- 1 Braille keyboard
- 1 Braille printer
- 4 additional licenses for Jaws 16.0
- JAWS is a screen reading software developed for computer users whose vision loss prevents them from seeing screen content. JAWS reads aloud what’s on the PC screen.
- 4 additional ZoomText licenses
- ZoomText is a screen-magnification and screen-reading program that provides students with visual impairments both visual and auditory access to what is on the screen. Content can be enlarged from 1.25x to as much as 36x the original size. (Al Squared)
- 2 Livescribe Smartpens
  Records everything you hear, say and write, while linking your audio recordings to your notes. Quickly replays audio from your Livescribe notebook paper, with a simple tap on your
handwritten notes, or transfer notes and audio to your computer for fast, easy access to what’s important.

- 2 Trackballs
- 1 Bat Keyboard
- One handed keyboard designed to operate all funds of a standard computer keyboard.
- 2 Ergonomic Keyboards/Split Keyboard
  - Alternative keyboard that allows for more comfortable typing and proper wrist support and reduces the strain on the user’s hand and wrist by straightening and aligning them with the directions of the keys. Fixed angle design splits the alphanumeric keys at a fixed angle and they slightly tent the keyboard.
  - Adjustable angle design splits the alphanumeric keys at an angle that can be adjusted by the user and they slightly tent the keyboard. Completely split designs separate the left and right hand portions of the keyboard.
- 2 Talking Scientific Calculators/Talking Calculators

ETF ITEMS

1. **(Tutoring Center Signage TV)**
   - (3,000)
   - Person Responsible: Chris Stallings, Rachel Overbey, Paul Loving
   - Planned implementation date: Upon Arrival
   - Expected Source of Funds: Tech Plan, ETF
   - Planned Completion date: 06/30/17
   - Brief Narrative: The separate phases of this project can be completed within different timeframes based on available resources but it must begin with Phase I, the digital interactive signage monitor with applicable software that will fill the needs designed by our tutoring services administrators. The integration of the interactive system with PeopleSoft and our signin process is a second step that would require the partnership of IT. The final phase of building a usable repository would also require the partnership of IT and the purchasing of iPads for the access of this information.
   - Digital Interactive Signage Monitor (Qty. 1) -
   - Integration of signage monitor with PeopleSoft and applicable signin software and card reader
   - Creation of a database (repository) to house faculty educational materials
   - iPads (Qty. 6)

2. **Media Services AV Support**
   - (9,500)
   - Person Responsible: Rachel Overbey, David Dillon
   - Planned implementation date: 07/1/16
   - Expected Source of Funds: Tech Plan, ETF
   - Planned Completion date: 06/30/17
   - Brief Narrative: To improve specifically the visual portion of video for the campus video recordings.

**ITEM 1.**
Cintiq 13HD Interactive Pen Display.
To add expanded control and efficiency to our graphics and video editing stations.

**ITEM 2.**
Panasonic HC– X1000 – 4K ultra HD camcorders.
Proactively move away from tape based video recording and assign one camcorder for event recording in our WAS Blackbox theater and one for event recording in our Seefeldt Lakeside theater.

ITEM 3.
Color LED spot panels, Model: Visual Buddha 1x1 Bi-color with V-mount battery plate.
To optimize resolution with our video and photo sessions.

To provide better resolution capability with our Back Bone GoPro department camera in variable shooting situations.

ITEM 4.
GoPro camera Gimbal.
FEIYU G4-QD 3-Axis Gimbal from Back-Bone product accessories.
Required to provide ultra-smooth videos when the camera is hand carried video recording scenes.

3. (Cinema style zoom lens) $ (4,499)
Person Responsible: Chris Stallings, Paul Loving
Planned implementation date: 10/15/16 – will be testing in the 2016 fall semester and fully implement in continuous projects (as noted above in the narrative) and semester classes in January, 2017.
Expected Source of Funds: Tech Plan, ETF
Planned Completion date: ongoing
Brief Narrative: Currently, the only lenses we have for our RED Epic camera are prime lenses which are good but they only hold one focal length and can not be used to change focal length during a continuous shot. We need a professional cinema lens to compliment the beauty of the RED Epic camera.

- Tokina Cinema 50-135mm T3.0 with PL or Canon Mount

4. (Film/Video Follow Focus) $ (2,111)
Person Responsible: Chris Stallings, Paul Loving
Planned implementation date: 10/15/16 – will be testing in the 2016 fall semester and fully implement in continuous projects (as noted above in the narrative) and semester classes in January, 2017.
Expected Source of Funds: Tech Plan, ETF
Planned Completion date: ongoing
Brief Narrative: When using a zoom lens, focus must be changed while filming the scene and a cinema lens is large and can not be done alone by the camera operator. An assistant is used that will “pull focus” – changing the focus while not watching the recording and framing of the scene but only concentrating on keeping the key elements in focus. To match the fitting on the RED Epic camera, it must be compatible with 19mm rod supports.

- OConnor O-Focus Dual Mini Photo Set

5. iPads (Division/Advising) $ (1,200)
Person Responsible: Jenny Lopez, Maddie Coradin, Georgette Harris, Rachel Overbey,
Paul Loving  
Planned implementation date: 9/1/16  
Expected Source of Funds: Tech Plan, ETF  
Planned Completion date: ongoing  
Brief Narrative: For use in individual and group advising sessions. Administered by the FAM and office staff.

6.  Epson 7900 Printer (Photography)  
(4,000)  
Person Responsible: Gail Rebhan, Rachel Overbey, Paul Loving  
Planned implementation date: 8/1/16  
Expected Source of Funds: Tech Plan  
Planned Completion date: ongoing  
Brief Narrative: The Epson 7900 printer in room 106 broke. The printer’s warranty expired on September 25, 2014. NOVA purchased the printer in August 2013. The cost of repair could be as much as $2,879.

7.  Canon EOS 7D Mark II DSLR Camera with 18-135mm and 70-300mm Lenses Kit  
(3,000)  
Person Responsible: Chris Stallings, Rachel Overbey, Paul Loving  
Planned implementation date: 08/15/16 – will be using in Fall 2017 semester and going forward.  
Expected Source of Funds: Tech Plan  
Planned Completion date: ongoing  
Brief Narrative: Unfortunately, we have lost two DSLR cameras in the past four years from students who have failed to return them to the library. As such, the students are at a disadvantage for using equipment for their projects.  
- Canon 7D bundle with case, media card and two lenses (18-135mm and 70-300mm)

8.  Geology Lab / 12 Laptops  
(14,000)  
Person Responsible: Assistant Dean Vasanthi Krishnan, Rachel Overbey, Paul Loving  
Planned implementation date: 7/1/16  
Expected Source of Funds:  
Planned Completion date:  
Brief Narrative:  
Laptops needed for use in geology labs, so students can conduct lab experiments, take readings, and collect data in the lab setting.

9.  Physics Lab / 4 Laptops  
(8,000)  
Person Responsible: Assistant Dean Vasanthi Krishnan, Rachel Overbey, Paul Loving  
Planned implementation date: 7/1/16  
Expected Source of Funds: Tech Plan, ETF  
Planned Completion date:  
Brief Narrative:  
Four (4) more laptops needed to complete a classroom set of laptops for the physics lab. Students conduct a variety of experiments and collect data with instrumentation and software that is directly connected to the laptops.

10. Chemistry Lab / Deionizer  
(1,795)
Person Responsible: Assistant Dean Vasanthi Krishnan, Paul Loving  
Planned implementation date: 7/1/16  
Expected Source of Funds: Tech Plan, ETF  
Planned Completion date: 6/30/17  
Brief Narrative: Deionizer needed to produce deionized water for chemistry labs.

11. **AIR lab / Two (2) oil furnaces**  
(3,600)  
Person Responsible: Assistant Dean Adam Johnson, Paul Loving  
Planned implementation date: 7/1/16  
Expected Source of Funds: Tech Plan, ETF  
Planned Completion date: 6/30/17  
Brief Narrative: Up-to-date oil furnaces needed for instruction in HVAC labs.

12. **AIR lab / cooling tower**  
(2,300)  
Person Responsible: Assistant Dean Adam Johnson, Paul Loving  
Planned implementation date: 7/1/16  
Expected Source of Funds: Tech Plan, ETF  
Planned Completion date: 6/30/17  
Brief Narrative: Cooling tower needed for HVAC labs, specifically for instruction of heat exchangers.

13. **AIR lab / Two (2) heat pumps**  
(9,000)  
Person Responsible: Assistant Dean Adam Johnson, Paul Loving  
Planned implementation date: 7/1/16  
Expected Source of Funds: Tech Plan, ETF  
Planned Completion date: 6/30/17  
Brief Narrative: Up-to-date heat pumps needed for instruction in HVAC labs.

14. **AIR lab / centrifugal pump**  
(715)  
Person Responsible: Assistant Dean Adam Johnson, Paul Loving  
Planned implementation date: 7/1/16  
Expected Source of Funds: Tech Plan, ETF  
Planned Completion date: 6/30/17  
Brief Narrative: Centrifugal pump needed for instruction in HVAC labs, specifically in relation to hydraulic systems.

15. **AIR lab / Two (2) NEMA magnetic contactors**  
(715)  
Person Responsible: Assistant Dean Adam Johnson, Paul Loving  
Planned implementation date: 7/1/16  
Expected Source of Funds: Tech Plan, ETF  
Planned Completion date: 6/30/17  
Brief Narrative: Magnetic contactors (motor starters) needed for lab instruction, specifically in relation to instruction of electrical HVAC lab equipment with large electrical loads.

16. **AIR lab / oil burner demonstration**  
(11,250)
Person Responsible: Assistant Dean Adam Johnson, Paul Loving
Planned implementation date: 7/1/16
Expected Source of Funds: Tech Plan, ETF
Planned Completion date: 6/30/17
Brief Narrative: This equipment contains the components to allow an instructor to demonstrate an oil burner, which is used in oil furnaces and hot water heaters.

17. AIR lab / heat pump trainer
(30,116)
Person Responsible: Assistant Dean Adam Johnson, Paul Loving
Planned implementation date: 7/1/16
Expected Source of Funds: ETF
Planned Completion date: 6/30/17
Brief Narrative: This equipment simulates a split system heat pump, which the instructor can use to demonstrate the use of oil furnaces, electric furnaces, air handlers, and evaporator coil combinations.

18. Massage Therapy / Three (3) Electric Table Lifts
(2,688)
Person Responsible: Assistant Dean Nancy Crippen, Paul Loving
Planned implementation date: 7/1/16
Expected Source of Funds: Tech Plan, ETF
Planned Completion date: 6/30/17
Brief Narrative: Our current massage tables are fixed, which means that they are “one-size-fits-all.” The use of electric table lifts will allow use of the tables for a variety of clients. Adjustable tables are used routinely in a professional setting and will provide NOVA students with a more realistic experience.

19. Assistive Technology Lab for testing and use of students with disabilities.
(15,000)
Person Responsible: Mary Beth Bradley, Rachel Overbey, Paul Loving
Planned Implementation Date: 7/1/16
Expected Source of Funds: Tech Plan, ETF
Planned Completion Date: August 2016
The Assistive Technology Testing Lab will be used primarily for testing student with disabilities. With the increasing number of student with accommodations, it is a necessary resource for compliance with ADA law. When not used for testing, this lab will be used as a properly equipped space for students with disabilities to complete assignments, a workspace for faculty with disabilities, an overflow testing room for the Testing Center, and a training space for instructive technology.
Required Equipment:
- 8 PCs
- 2 Macs
- 10 headsets
- 1 CCTV/magnifier

20. 55" TV Monitor for 402 Conf. Room
$ (5,000)
Person Responsible: David Epstein, Rachel Overbey, Obed Sorto
Planned implementation date: Upon Arrival  
Expected Source of Funds: Tech Plan, ETF  
Planned Completion date: 6/30/17  
Brief Narrative: Right now we have no ability to project or display anything in the conference room. We would like to have people capability to the other conference rooms in terms of projection for meetings, Instruction, and advising purposes. We would need to determine electrical wiring and structural support in the wall in the conference room to accommodate this purchase.

Tech Plan: $323,520  
ETF: $132,790  
TOTAL TECH PLAN: $456,310

2016-17 Unit Technology Plan Format
Institutional Effectiveness & Student Success Initiatives
TABLE LISTING EACH TECHNOLOGY PLAN PROJECT/ACTIVITY AND ESTIMATED COST
Add additional lines as needed.

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Estimated Cost</th>
<th>Estimated Start Date</th>
<th>Estimated Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Liquid Planner</td>
<td>$3,312</td>
<td>May 1, 2016</td>
<td>April 30, 2017</td>
</tr>
<tr>
<td>2 EMSI</td>
<td>$13,000</td>
<td>May 31, 2016</td>
<td>May 30, 2017</td>
</tr>
<tr>
<td>3 SAS EA Ste</td>
<td>$6,140</td>
<td>May 31, 2016</td>
<td>May 30, 2017</td>
</tr>
<tr>
<td>4 Tableau</td>
<td>$2,100</td>
<td>Jun 28, 2016</td>
<td>Jun 27, 2017</td>
</tr>
<tr>
<td>5 Clarus Classtracks</td>
<td>$25,959</td>
<td>Oct 16, 2016</td>
<td>Oct 17, 2017</td>
</tr>
<tr>
<td>6 Qualtrics</td>
<td>$2,500</td>
<td>Sept 20, 2016</td>
<td>Sept 19, 2017</td>
</tr>
<tr>
<td>7 Hobsons</td>
<td>$128,700</td>
<td>Mar 1, 2016</td>
<td>Feb 28, 2017</td>
</tr>
<tr>
<td>8 Experian Data Quality</td>
<td>$5,000</td>
<td>Mar 1, 2016</td>
<td>Feb 28, 2017</td>
</tr>
<tr>
<td>9 Student Success Orientation Software</td>
<td>$65,000</td>
<td>Jul 1, 2016</td>
<td>Jun 30, 2017</td>
</tr>
<tr>
<td>10 MIS</td>
<td>$11,600</td>
<td>Jul 1, 2016</td>
<td>Jun 30, 2017</td>
</tr>
<tr>
<td>11 ProQuest Journals</td>
<td>$11,015</td>
<td>Jun 1, 2016</td>
<td>May 31, 2017</td>
</tr>
<tr>
<td>12 VOCUS</td>
<td>$13,795</td>
<td>Jul 1, 2016</td>
<td>Jun 30, 2017</td>
</tr>
<tr>
<td>13 Meltwater</td>
<td>$12,000</td>
<td>Jun 29, 2016</td>
<td>Jun 28/17</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$300,121</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NARRATIVE**
*(Provide *brief* narrative for each item. Be sure it includes the information specified below as indicated. Implementation dates and completion should be realistic and not just July 1-June 30.)*

**Liquid Planner**  
$3,312  
Person Responsible: Saurabh Niraula  
Planned implementation date: May 1, 2016  
Planned Completion date: April 30, 2017
Expected Source of Funds: 160022
Renewal of Project Management software

**EMSI**
- **$13,000**
- Person Responsible: George Gabriel
- Planned implementation date: May 31, 2016
- Expected Source of Funds: 112217
- Planned Completion date: May 30, 2017
- Access to ten users to zip and county data 80 counties

**SAS EA Ste**
- **$6,140**
- Person Responsible: George Gabriel
- Planned implementation date: May 31, 2016
- Planned Completion date: May 30, 2017
- Five installed units of Education Analysis Suite; Four SAS Enterprise Minor for Desktop installs

**Tableau**
- **$2,100**
- Person Responsible: George Gabriel
- Planned implementation date: Jun 28, 2016
- Expected Source of Funds: 160022
- Planned Completion date: Jun 27, 2017
- Two units of Desktop-Professional user maintenance: Ten units of maintenance renewal for Server-Web Client Interactor

**Clarus Classtracks**
- **$25,959**
- Person Responsible: George Gabriel
- Planned implementation date: Oct 16, 2016
- Planned Completion date: Oct 17, 2017
- Annual Renewal of scheduling software

**Qualtrics**
- **$2,500**
- Person Responsible: George Gabriel
- Planned implementation date: Sept 20, 2016
- Expected Source of Funds: 160022
- Planned Completion date: Sept 19, 2017
- Renewal for three users; survey license; research

**Hobsons**
- **$128,700**
- Person Responsible: George Gabriel
- Planned implementation date: Mar 1, 2016
- Planned Completion date: Feb 28, 2017
- Expected Source of Funds: 112217
- Renewal for Customer Relationship Manager Software

**Experian Data Quality**
- **$5,000**
- Person Responsible: George Gabriel
- Planned implementation date: Mar 1, 2016
- Expected Source of Funds: 112217
Planned Completion date: Feb 28, 2017
Renewal of on demand address verification software in conjunction with Hobson’s (Advantage Design Group) in RFP State with Purchasing $65,000
Person Responsible: Mark Mannheimer
Planned implementation date: July 1, 2016
Planned Completion date: June 30, 2017
Expected Source of Funds: 112217
Web based orientation software; currently out to bid (RFP)

**MIS** $ 11,600
Person Responsible: Amanda Gillespie
Planned implementation date: July 1, 2016
Planned Completion date: June 30, 2017
Expected Source of Funds: 164008
Targeted marketing address data; one time use

**ProQuest Journals** $11,015
Person Responsible: George Gabriel
Planned implementation date: Jun 1, 2016
Expected Source of Funds: 164008
Planned Completion date: May 31, 2017
Access to education journals; renewal

**Cision** (formerly Vocus) $13,795
Person Responsible: George Gabriel
Planned completion date: Jul 1, 2016
Planned Completion date: Jun 30, 2017
Expected Source of Funds: 112107
Renewal for Media Relations Software

**Meltwater** $12,000
Person Responsible: George Gabriel
Planned implementation date: July 1, 2016
Expected Source of Funds: 164008
Planned Completion date: Jun 28, 2017
Renewal for Global Print Media and News

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**2016-2017**  
**Instructional and Information Technology**  
**Vice President**  
**FY17 Unit Technology Plan**

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Estimated Cost</th>
<th>Estimated Start Date</th>
<th>Estimated Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 P-14 Positions</td>
<td>$ 75,000</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
</tr>
<tr>
<td>2 Restricted Positions</td>
<td>$350,000</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
</tr>
<tr>
<td>4 UsableNet Assistive Technology</td>
<td>$ 6,300</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
</tr>
<tr>
<td>5</td>
<td>Staff Augmentation</td>
<td>$125,000</td>
<td>July 1, 2016</td>
</tr>
<tr>
<td>6</td>
<td>Memberships</td>
<td>$45,000</td>
<td>July 1, 2016</td>
</tr>
<tr>
<td>7</td>
<td>Conferences and Travel</td>
<td>$10,000</td>
<td>July 1, 2016</td>
</tr>
<tr>
<td>9</td>
<td>NetKare Services</td>
<td>$15,500</td>
<td>July 1, 2016</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$626,800</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NARRATIVE**

*Provide brief narrative for each item. Be sure it includes the information specified below as indicated. Implementation dates and completion should be realistic and not just July 1-June 30.*

**P-14 Positions**  
$75,000  
Person Responsible: Shelli Jarvis  
Planned implementation date: July 1, 2016 (recurring)  
Planned Completion date: June 30, 2017 (recurring)  
Expected Source of Funds: Vice President’s budget  
Brief narrative/explanation/description: Two positions provide front desk coverage and ELI student services support; 2 positions provide student information programming support

**Restricted Positions**  
$350,000  
Person Responsible: Dr. Steve Sachs  
Planned implementation date: July 1, 2016 (recurring)  
Planned Completion date: June 30, 2017 (recurring)  
Expected Source of Funds: Vice President’s budget  
Brief narrative/explanation/description: These restricted positions support campus services, project management and IT Support Services (server and network services)

**Usablenet Assistive Technology**  
$6,300  
Person Responsible: Dr. Steve Sachs and Director of Disability Services  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: Vice President’s Budget  
Brief narrative/explanation/description: Web interfaces to improve the accessibility to www.nvcc.edu for students with disabilities

**Staff Augmentation**  
$125,000  
Person Responsible: Dr. Steve Sachs, Shelli Jarvis  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: Vice President’s budget  
Brief narrative/explanation/description: Professional services and skilled IT labor to support VDI, application development, and project management initiatives

**Memberships (Various)**  
$45,000  
Person Responsible: Dr. Steve Sachs  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: Vice President’s budget
Annual membership fees/dues for on-line community colleges and related memberships not supported by the college-wide membership budget

**Conferences and Travel**  
$10,000  
Person Responsible: Dr. Steve Sachs  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: Vice President’s budget  
Brief narrative/explanation/description: To support attendance at ASAC, VCCS Tech Council, ACCS, and related professional development conferences, workshops and training

**NetKare Services**  
$15,500  
Person Responsible: Dr. Steve Sachs, Allen Sinner  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: Vice President’s budget  
Brief narrative/explanation/description: To support specialized testing, configuration and maintenance needs

**Extended Learning Institute**

**FY 16 Unit Technology Plan**

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Estimated Cost</th>
<th>Estimated Start Date</th>
<th>Estimated Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Smartermeasure</td>
<td>$70,000</td>
<td>July 2016</td>
<td>2-year contract, lasts through June 2018</td>
</tr>
<tr>
<td>2 Additional live events in INXPO Virtual Professional Development Center</td>
<td>$60,000</td>
<td>September 2016</td>
<td>April 2017</td>
</tr>
<tr>
<td>3 24/7 Help Desk</td>
<td>$125,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>4 Student Lingo webinars</td>
<td>$10,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>5 Library databases/digital resources for ELI courses</td>
<td>$85,000</td>
<td>Various</td>
<td>Various</td>
</tr>
<tr>
<td>6 Focus2 Software</td>
<td>$1,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>7 Thinkstock (digital images for courses, marketing, student activities)</td>
<td>$6,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>8 Smarthinking tutoring services (additional hours)</td>
<td>$50,000</td>
<td>November 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>9 IT-related P14 staff (including captioning P14 for disability accommodations)</td>
<td>$250,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>10 Lynda.com (on-demand IT training for faculty and staff)</td>
<td>$4,200</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>11 IT Supplies</td>
<td>$125,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Cost</td>
<td>Start Date</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>12</td>
<td>Quality Matters (course reviews, faculty professional development)</td>
<td>$25,000</td>
<td>July 2016</td>
</tr>
<tr>
<td>13</td>
<td>Staff training</td>
<td>$30,000</td>
<td>July 2016</td>
</tr>
<tr>
<td>14</td>
<td>New Equipment</td>
<td>$125,000</td>
<td>July 2016</td>
</tr>
<tr>
<td>15</td>
<td>ProctorU Video Proctoring</td>
<td>$250,000</td>
<td>July 2016</td>
</tr>
<tr>
<td>16</td>
<td>Classroom/Conf Room Refresh</td>
<td>$15,000</td>
<td>January 2017</td>
</tr>
<tr>
<td>17</td>
<td>Travel and Conferences</td>
<td>$20,000</td>
<td>July 2016</td>
</tr>
<tr>
<td>18</td>
<td>Recording room remodel</td>
<td>$30,000</td>
<td>September 2016</td>
</tr>
<tr>
<td>19</td>
<td>Virtual Computer Lab</td>
<td>$125,000</td>
<td>July 2016</td>
</tr>
<tr>
<td>20</td>
<td>Ergonomic upgrades to workstations</td>
<td>$8,000</td>
<td>July 2016</td>
</tr>
<tr>
<td>21</td>
<td>Exercise equipment replacement</td>
<td>$8,000</td>
<td>July 2016</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,422,200</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NARRATIVE**

**Item 1: Smartermeasure ($70,000)**

Person Responsible: Jennifer Lerner/Cynthia Pascal  
Planned implementation date / completion date: Renewed annually with contract running approximately July to June.  
Expected source of funds: College  
Narrative: Smartermeasure is an online tool to assess student readiness to take online courses. It is used for SSDL students, in ELI orientation for new online students, in ELI SDV courses, and made available for potential students considering ELI.

**Item 2: Virtual Conference Software ($60,000)**

Person Responsible: Jennifer Lerner/Preston Davis  
Planned implementation date: next live event Sept. or Oct. 2016  
Planned completion date: last event for 2016-17 in March or April 2017  
Expected source of funds: College  
Narrative: We launched our Virtual Professional Development Center in Spring 2016. Additional funds will support additional live conference events on this platform including captioning costs, technical support, training for presenters, platform configuration, and advisory services from the vendor (INXPO).

**Item 3: 24/7 Help Desk ($125,000)**

Person Responsible: Susan Picard/ Steve Sachs  
Planned implementation date / completion date : contract runs year round, so July 1 2014 to June 30 2015  
Expected source of funds: College  
Narrative: The college uses a vendor to provide 24/7 IT Help Desk Support. This support is particularly critical for online learners, and the 24/7 vendor provides support for ELI students for both IT questions and student services questions. The 24/7 help desk is also a service provided through our
SSDL network to VCCS partner colleges. Because of our heavy use of the service, ELI funds part of the total college cost of the 24/7 help desk.

**Item 4: Student Lingo webinars ($10,000)**

Person Responsible: Cynthia Pascal  
Planned implementation date / completion date: contract runs entire fiscal year  
Expected source of funds: College  
Narrative: Student Lingo is a vendor that provides on-demand student development webinars (topics include study skills, test-taking strategies, writing a resume, etc.). These webinars are part of ELI’s overall student development programming, parallel to workshops offered by student services departments on campus. They are also used in ELI’s SDV courses as instructional materials.

**Item 5: library databases/digital materials ($85,000)**

Person Responsible: Heather Blicher/Preston Davis  
Planned implementation date / completion date: throughout the year, on the college’s collection development cycle  
Expected source of funds: College  
Narrative: Working with the college’s library staff, ELI funds a variety of online research databases and other digital materials to support our academic programs.

**Item 6: Focus 2 career development software ($1,000)**

Person Responsible: Christy Jensen/Cynthia Pascal  
Planned implementation date / completion date: contract renewed annually, runs for fiscal year  
Expected source of funds: College  
Narrative: The Focus2 software is career development software used by ELI’s career counselor, the Pathway to the Baccalaureate program, and some campus career counselors to work with students on developing and pursuing their career goals. Cost stated reflects ELI’s portion of the cost, which is split with other units.

**Item 7: Thinkstock licenses ($6,000)**

Person Responsible: Preston Davis/Hong Wang  
Planned implementation date / completion date: licenses renewed annually  
Expected source of funds: College  
Narrative: Thinkstock is an image database used by the ELI instructional design staff, the ELI social media staff, and the ELI web design staff to acquire high-quality images (which can be used without violating copyright laws) for use in online courses, the ELI website, training websites/materials, and social media including Facebook and the Virtual Student Union.

**Item 8: Smarthinking tutoring ($50,000)**

Person Responsible: Preston Davis/Karen Kempter  
Planned implementation date / completion date: renewal point will be selected at some point during the fiscal year based on actual usage of current tutoring hours already on hand and when balance gets low enough that we should purchase additional hours  
Expected source of funds: College  
Narrative: ELI students need to have access to online tutoring services to support them in their ELI courses. Smarthinking tutoring services are provided to ELI students and to SSDL students. The
service is purchased by the hour, and this fiscal year our balance will be low enough that it will be
time to purchase additional hours. We use 200-300 hours of tutoring per month.

**Item 9: IT-related P14 staff ($250,000)**

Person Responsible: Sue Picard, Preston Davis, Jennifer Lerner  
Planned implementation date / completion date: P14 staff work throughout the fiscal year  
Expected source of funds: College  
Narrative: ELI employs several P14 staff working on IT projects/tasks – a database specialist, an
evening support person for faculty/student support in synchronous class meetings, a desktop
support/faculty training specialist, a web design specialist, and a Blackboard help desk specialist. All
but the web design specialist work 29 hours/week; the web design specialist works on projects on an
as-needed basis. We also hope this year to add a P14 staff member to caption our large number of
videos for our training unit and for ELI courses, needed for compliance with ADA regulations.

**Item 10: Lynda.com ($4,200)**

Person Responsible: Sue Picard/Preston Davis  
Planned implementation date / completion date: annual licenses  
Expected source of funds: College  
Narrative: Lynda.com is an IT training resource used by ELI IT staff, ELI instructional design staff,
TAC staff, and some faculty to learn additional skills on hardware and software products used in
developing and supporting distance learning and instructional technology at the college. It is more
cost effective than sending staff to outside training events because licenses can be rotated among
users as needed and staff do not incur the cost and lost time related to traveling to training.

**Item 11: IT supplies ($125,000)**

Person Responsible: Sue Picard  
Planned implementation date / completion date: as needed  
Expected source of funds: College  
Narrative: ELI has a staff of approximately 70, and most are heavy technology users. We also provide
workstations and IT rooms (e.g., recording rooms) for faculty. We have an ongoing need to IT
supplies such as monitors, cabling, speakers, headsets, webcams, wireless mouses and keyboards for
training/presentations, still and video cameras, tablets and other mobile devices for training and
demos, etc. Equipment standardization planned with targeted workstation configurations focused on
docks, monitors and peripheral upgrades.

**Item 12: Quality Matters ($25,000)**

Person Responsible: Will Hatheway  
Planned implementation date / completion date: annual membership; course review costs each fall
and spring; training costs each summer, fall, and spring  
Expected source of funds: College  
Narrative: ELI is part of the VCCS consortium membership to Quality Matters, the nationally
recognized organization setting standards for excellent online courses. The membership fee to the
consortium is approximately $2000/year. ELI must pay $25/faculty member we train on the Quality
Matters system, and we train approximately 90 faculty per year, for a total cost of $2,250. Ten to
twelve ELI staff are QM certified and periodically have to take update training to maintain their
certification; these trainings cost $0 to $500 each. Finally, QM evaluates and certifies courses with a
QM seal at $1,000 per review, and ELI will run up to 25 of its best courses through this process in
this fiscal year.

**Item 13: Staff training ($30,000)**

Person Responsible: Sue Picard, Preston Davis, Jennifer Lerner  
Planned implementation date / completion date: ongoing throughout the year  
Expected source of funds: College  
Narrative: ELI and TAC staff need to engage in regular, high-quality training on new and changing hardware and software to be able to train college faculty and staff on the technologies they need to do their jobs. Training on such core products as Adobe products, Articulate and Captivate, various types of tablets, and more is required for successful functioning in these jobs. Training funds cover professional training for more than 25 staff.

**Item 14: New Equipment ($125,000)**

Person Responsible: Sue Picard  
Planned implementation date / completion date: ongoing throughout the year  
Expected source of funds: College  
Narrative: ELI needs to stay current with the latest version of tablets, computers, and software/applications for development and delivery of online instruction; and, current equipment must continually be refreshed—especially Macs.

**Item 15: ProctorU Video Proctoring ($250,000)**

Person Responsible: Preston Davis  
Planned implementation date / completion date: ongoing throughout the year  
Expected source of funds: College  
Narrative: Proctored tests are a required part of all ELI courses, and use of ProctorU takes pressure off campus testing centers and makes testing more accessible to all online students. ELI also plans to pilot test use of ProctorU from on campus computer labs at ELI expense.

**Item 16: Classroom/conference room Refresh ($15,000)**

Person Responsible: Shelli Jarvis  
Planned implementation date / completion date: January 2017-March 2017  
Expected source of funds: College  
Narrative: Upgrades and refreshes to technology in training rooms and conference rooms at ELI’s Pender Drive facility.

**Item 17: Travel and conferences ($20,000)**

Person Responsible: Jennifer Lerner  
Planned implementation date / completion date: ongoing throughout the year  
Expected source of funds: College  
Narrative: Funding to insure ELI maintains its leadership position throughout Virginia and the U.S. by demonstrating our use of technology and by bringing back information on what others are doing with technology from national conferences and meetings.

**Item 19: Recording Room Remodel ($35,000)**

Person Responsible: Sue Picard
Planned Implementation date/completion date: September 2016-December 2016  
Expected source of funds: College  
Narrative: With the installation of new security doors just outside of the current recording spaces, these spaces are no longer usable without remodeling and retrofitting to mitigate outside noise. Plan includes construction to consolidate the two rooms, install soundproofing, and upgrading furniture and computer equipment.

Item 20: Virtual Computer Lab ($125,000)  
Person Responsible: Sue Picard  
Planned implementation date/completion date: July 2016 – September 2016  
Expected source of funds: College  
Narrative: A virtual computer lab is needed for a variety of online classes. For example, Cyber Security class ITN 277 requires students to use forensic software to complete investigative assignments on computer systems. The virtual lab can provide multiple environments and configurations, all configured and separated from college networks. Students are thus able to perform administrative tasks on virtual systems without risk to the college networks. This environment could also be utilized by on-campus labs where reconfiguring entire labs for specific classes is problematic. Funding includes purchasing the system hardware and hiring a contractor to manage the installation and configuration.

Item 21: Ergonomic upgrades to workstations ($8,000)  
Person Responsible: Sue Picard  
Planned Implementation date/completion date: July 2016 – December 2016  
Expected source of funds: College  
Narrative: Provide stand-up desks and other healthy/alternative equipment and configurations to workstations not already outfitted. Also provide this equipment in office spaces in common areas, those not specifically assigned to individuals, but open for use (faculty areas, for example).

Item 22: Exercise Equipment Replacement ($8,000)  
Person Responsible: Sue Picard  
Planned implementation date/completion date: July 2016 – September 2016  
Expected source of funds: College  

**College Information Systems**

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Estimated Cost</th>
<th>Estimated Start Date</th>
<th>Estimated Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>P14s</td>
<td>144,500</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
</tbody>
</table>
IT Supplies $19,000
Person Responsible: Jeff Petrarca Planned implementation date: July 2016 Planned Completion date: June 2017 Expected Source of Funds: CIS Budget
Brief narrative: IT supplies; includes $3000 for training and testing PS functionality with VCCS for AIS, HR, SIS functional leads

Travel and Conferences $15,000
Person Responsible: Jeff Petrarca Planned implementation date: July 2016

TOTAL 205,500

NARRATIVE

P---14s $ (144,500)
Person Responsible: Jeff Petrarca Planned implementation date: July 2016 Planned Completion date: June 2017 Expected Source of Funds: CIS Budget
Brief narrative: P14s to support Academic Advising; ELI and SSDL Reports; New P14 to manage EMPL ID project and Student Records; includes FICA.

IT Supplies $19,000
Person Responsible: Jeff Petrarca Planned implementation date: July 2016 Expected Source of Funds: CIS Budget Planned Completion date: June 2017

Travel and Conferences $15,000
Person Responsible: Jeff Petrarca Planned implementation date: July 2016

Expected Source of Funds: CIS Budget
Planned Completion date: June 2017
Brief narrative: Travel to VCCS and College meetings/training.

**Equipment Refresh**
- **Cost**: $15,000
- **Person Responsible**: Planned
  - Jeff Petrarca
- **Implementation Date**: Planned
  - July 2016
- **Completion Date**: Expected
  - June 2017 CIS
- **Source of Funds**: Budget

Description: Refresh of equipment not covered by College Technology Plan (e.g. tablets)

**New Equipment**
- **Cost**: $15,000
- **Person Responsible**: Planned
  - Jeff Petrarca
- **Implementation Date**: Planned
  - July 2016
- **Completion Date**: Expected
  - June 2017 CIS
- **Source of Funds**: Budget

Description: Purchase new equipment for testing and staff use.

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### Technology Applications Center
#### Information Technology Professional Services

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Estimated Cost</th>
<th>Estimated Start Date</th>
<th>Estimated Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Modo Labs Kurogo</td>
<td>$35,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>2 Staff Augmentation</td>
<td>$75,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>3 IT Help Desk P-14s</td>
<td>$150,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>4 IT Help Desk Ticketing Software</td>
<td>$80,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>5 New Technology for Testing</td>
<td>$85,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>6 Faculty / Staff Technology Training</td>
<td>$35,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>7 Professional Development</td>
<td>$55,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td>8 Travel and Conferences</td>
<td>$20,000</td>
<td>July 2016</td>
<td>June 2017</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$535,000</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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### NARRATIVE

**Item 1: Modo Labs Kurogo ($35,000)**

Person Responsible: Ken Hudak
Planned implementation date: July 2016
Planned completion date: June 2017
Expected source of funds: College
Narrative: Kurogo is mobile app software from Modo Labs. It will provide NOVA with content rich mobile websites for IOS and Android platforms. An ELI student app is currently under development with additional apps under consideration.
Item 2: Staff Augmentation ($75,000)

Person Responsible: Ken Hudak
Planned implementation date: July 2016
Planned completion date: June 2017
Expected source of funds: College
Narrative: Additional technicians and clerical support for college staff to support college staff on projects at the admin campus in support of remote campuses. The current hiring freeze has adversely affected our ability to provide adequate service to campuses.

Item 3: IT Help Desk P-14s ($150,000)

Person Responsible: Ken Hudak
Planned implementation date: July 2016
Planned completion date: June 2017
Expected source of funds: College
Narrative: Additional technical staff to support off-shift helpdesk coverage requirements and supplement for currently open positions we are prohibited from filling. This will reduce overall external cost to outside vendors while improving service to faculty, staff, and students.

Item 4: IT Help Desk CRM/Ticketing Software ($80,000)

Person Responsible: Ken Hudak
Planned implementation date: July 2016
Planned completion date: June 2017
Expected source of funds: College
Narrative: The current tool we are using as a ticketing system on the IT Help Desk restricts our ability to provide adequate service to our faculty, staff, and students. This is for IT Help Desk ticketing software that would allow accurate incident logging, tracking, and reporting, including knowledge base functionality, in order to provide best possible service to our customers, as well as contributing to proactive problem identification and resolution.

Item 5: New Technology for Testing ($85,000)

Person Responsible: Ken Hudak
Planned implementation date: July 2016
Planned completion date: June 2017
Expected source of funds: College
Narrative: New and emerging technologies to be acquired in support of college efforts to provide state of the art tools for faculty, staff, and students. ITPS must support emerging technologies as they are constantly being introduced in our BYOD environment.

Item 6: Faculty & Staff Technology Training ($35,000)
Person Responsible: Ken Hudak
Planned implementation date: July 2016
Planned completion date: June 2017
Expected source of funds: College
Narrative: Staff training on the adoption of new software and hardware. This also encompasses updated/refresher training on existing tools, software, and hardware currently used in the performance of their job role.

Item 7: Professional Development ($55,000)

Person Responsible: Ken Hudak
Planned implementation date: July 2016
Planned completion date: June 2017
Expected source of funds: College
Narrative: Training for ITPS staff in support of their career goals that further support and contribute to our recognition as the #1 Digital Community College. This to include technical and non-technical job-related certifications and badging.

Item 8: Travel and Conferences ($20,000)

Person Responsible: Ken Hudak
Planned implementation date: July 2016
Planned completion date: June 2017
Expected source of funds: College
Narrative: Travel and participation for group managers in conferences, user groups, and VCCS meetings (Team Dynamics, Kurogo, ACCS, Shared Services, etc.)

### Video Services

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Estimated Cost</th>
<th>Estimated Start Date</th>
<th>Estimated Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 P-14 Producer/Director</td>
<td>$28,000.00</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
</tr>
<tr>
<td>2 Producer(1), Engineer (1)</td>
<td>$158,000.00</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
</tr>
<tr>
<td>3 Studio and Control Room</td>
<td>$10,000.00</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Master Control Upgrades/Maintenance</td>
<td>$40,000.00</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
</tr>
<tr>
<td>5 Programming Licenses</td>
<td>$15,000.00</td>
<td>October, 2016</td>
<td>July, 2017</td>
</tr>
<tr>
<td>6 Software and Licenses</td>
<td>$18,000.00</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Cost</td>
<td>Start Date</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>7</td>
<td>Radio System Upgrade/Maintenance</td>
<td>$38,000.00</td>
<td>July 1, 2016</td>
</tr>
<tr>
<td>8</td>
<td>TV Center Equipment</td>
<td>$22,000.00</td>
<td>July 1, 2016</td>
</tr>
<tr>
<td>9</td>
<td>Commencement Production</td>
<td>$20,000.00</td>
<td>May, 2017</td>
</tr>
<tr>
<td>10</td>
<td>Misc. Parts/Office Supplies</td>
<td>$5,000.00</td>
<td>July 1, 2016</td>
</tr>
<tr>
<td>11</td>
<td>Field Camera Replacement</td>
<td>$26,000.00</td>
<td>November, 2016</td>
</tr>
<tr>
<td>12</td>
<td>Streaming Services</td>
<td>$8,000.00</td>
<td>July 1, 2016</td>
</tr>
<tr>
<td>13</td>
<td>Captioning</td>
<td>$20,000.00</td>
<td>July 1, 2016</td>
</tr>
<tr>
<td>14</td>
<td>Master Control re-location</td>
<td>$200,000.00</td>
<td>June, 2016</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>$608,000.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

**NARRATIVE**

**P-14 Producer/Director**  
$28,000.00  
Person Responsible: Charles Siegel  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: M&O  
Brief narrative/explanation/description: Funding one 29/hr. per week Producer/Director Position for video production services

**Producer(1), Engineer (1)**  
$158,000.00  
Person Responsible: Charles Siegel  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: Cox Grant Account  
Brief narrative/explanation/description: Funding one full-time Producer/Director for video services and funding one Engineer for TV Center support

**Studio and Control Room Maintenance**  
$10,000.00  
Person Responsible: John Stephenson  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: M&O Account  
Brief narrative/explanation/description: Maintenance of Studio and Control Room facility

**Master Control Upgrades/Maintenance**  
$40,000.00  
Person Responsible: John Stephenson  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: M&O/Cox Grant Account  
Brief narrative/explanation/description: On-going Master Control upgrades of servers and equipment required for the operation of the Cable TV station and Video On Demand Systems.

**Programming Licenses**  
$15,000.00  
Person Responsible: Charles Siegel  
Planned implementation date: October, 2016  
Planned Completion date: July, 2017  
Expected Source of Funds: M&O/Cox Grant Account
<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Cost</th>
<th>Person Responsible</th>
<th>Planned Implementation Date</th>
<th>Planned Completion Date</th>
<th>Expected Source of Funds</th>
<th>Brief Narrative/Explanation/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software and Licenses</td>
<td>$18,000.00</td>
<td>John Stephenson</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
<td>M&amp;O</td>
<td>Licensing of TV programs for the College Cable TV Station for Master Control Operations, Audio creation, and Post-production</td>
</tr>
<tr>
<td>Radio System Maintenance</td>
<td>$38,000.00</td>
<td>Charles Siegel</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
<td>M&amp;O</td>
<td>Upgrade Radio system server and transmitter cards, Vendor contract to provide twice annual preventative maintenance. Cost of repair and/or replacement parts needed</td>
</tr>
<tr>
<td>TV Center Equipment</td>
<td>$22,000.00</td>
<td>Charles Siegel</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
<td>M&amp;O/Cox Grant Account</td>
<td>Purchase or cost to repair production and post-production equipment at the Television Center</td>
</tr>
<tr>
<td>Commencement Production</td>
<td>$20,000.00</td>
<td>Charles Siegel</td>
<td>May, 2017</td>
<td>May 2017</td>
<td>M&amp;O</td>
<td>Rental of Video production Truck and services As well as Day-hire of two Camera operators for the production of College Annual Commencement ceremonies.</td>
</tr>
<tr>
<td>Misc. Parts/Office Supplies</td>
<td>$5,000.00</td>
<td>John Stephenson</td>
<td>July 1, 2016</td>
<td>June 30, 2017</td>
<td>M&amp;O</td>
<td>Misc. cables/adaptors and Office Supplies</td>
</tr>
<tr>
<td>Field Camera Replacement</td>
<td>$26,000.00</td>
<td>John Stephenson</td>
<td>November, 2016</td>
<td>May, 2017</td>
<td>Cox Grant Account</td>
<td>Replace three Studio cameras that are at end of life.</td>
</tr>
</tbody>
</table>
**Streaming Services** $8,000.00  
Person Responsible: John Stephenson  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: M&O  
Brief narrative/explanation/description: Third Party Streaming Services for Live Streaming of Cable TV Channel and Live streaming of important college events.

**Programming Captioning** $20,000.00  
Person Responsible: John Stephenson  
Planned implementation date: July 1, 2016  
Planned Completion date: June 30, 2017  
Expected Source of Funds: M&O/Cox Grant Account  
Brief narrative/explanation/description: Captioning of programming for VOD and Cable TV

**Master Control Re-location** $200,000.00  
Person Responsible: John Stephenson  
Planned implementation date: June, 2016  
Planned Completion date: January, 2017  
Expected Source of Funds: Cox Grant Account  
Brief narrative/explanation/description: Re-location of Master Control including purchases of servers and equipment required for the operation of the Cable TV station and Video On Demand Systems in the new location.