UNIVERSITY OF LOUISIANA AT LAFAYETTE

STEP Committee

Technology Fee Application

Audio Visual (AV) Equipment for Non-lecture, Classrooms and Laboratories in the Department of Biology

Title

Sherry Krayesky-Self, William Schmidt, Sophie Plouviez, Heather Birdsong, Erin Sigel & Beth Stauffer

Name of Submitter (Faculty or Staff Only)

Department of Biology

Organization

Title: Audio Visual (AV) Equipment for all Non-lecture, **Date:** 7-15-19

Classrooms and Laboratories in the Department of Biology

Name (Contact Person): Sherry Krayesky-Self

Address: Room 108-c Department of Biology 410 St Mary Blvd, Lafayette, 70503

Phone Number: 337-482-5234 Email: sherryk@louisiana.edu

Department/College/Org: Department of Biology, College of Science

ABSTRACT (250 words or less):

The Department of Biology has approximately 900 students as majors. We also provide service classes that effect many other departments including, but not limited to Nursing and Kinesiology. Thousands of students pass through the department's classrooms each semester. STEP grants and funds from Distance Learning have allowed us to up-grade the audio-visual (AV) equipment in all three of our large lecture halls. We have also been able to upgrade the seating, paint and lights in room 222 Wharton, our largest lecture hall. However, the rest of our classrooms and laboratories need attention desperately. While some rooms have some AV equipment, just as many do not! All of our non-lecture classrooms have analog equipment rather than digital. The lack of appropriate equipment is limiting those people who are trying to teach, and more importantly it is limiting thousands of students who are trying to learn. This grant proposes to bring four of these classrooms up to date with modern AV equipment.

Project Description:

a. Purpose of grant and impact on student body as a whole:

This request is a re-submission. We are only including 4 of the 11 rooms we originally requested funding for. Audio-Visual equipment and computers in these classrooms is desperately needed. These rooms are either extremely high use rooms or they are high use rooms in abysmal condition. With thousands of students using the resources in the Department of biology every year, is very important that we up-date our equipment regularly. These rooms have not been updated during my time at UL, Lafayette. I came here in 2002!

While we still need 11 rooms up-graded, we have identified four rooms that are critical and in abysmal condition. This grant proposes to up-grade the AV capabilities of four classrooms, three in Billeaud and one in Wharton. Each room has different needs, therefore, the equipment we have requested for each room varies slightly (see table). One of the rooms, 106 in Billeaud, is a conference room. This room is used for senior and graduate level classes as well as student and faculty presentations and meetings of all types, academic and professional. We have requested video conferencing capabilities for this room. We have requested "idea-boards" for three classrooms, 113 and 122 in BLD and 416 in VLW. These boards will allow for interactive learning to take place. New digital projectors are requested for all rooms. I some cases the digital projectors are replacing analog projectors, in other cases there is currently no functioning projector present. Computers are requested for all of the rooms. We are also requesting white boards. This addresses the needs of a modern classroom, but it also eliminates the chalk dust that is very damaging to electronic equipment. Podiums that will house the computers and wiring are

necessary in several in the rooms. Currently none of the classrooms have podiums that house the AV equipment.

The minimum number of students this grant will affect is 900. However, that number only accounts for students who are biology majors and it only accounts for one year. If measured over the life time of the equipment use this grant will affect thousands of students with a variety of majors represented. A clearer indication of the number of students affected will be discussed in the justification section.

Table displays the equipment requested for each room

Room number & Building	Proj. Digital	PC video conf. capable	Physical mounts wiring	Screen	Idea Board	White Board	Comp.	Podium Tall	Podium small cabinet	Notes: \$1000.00 required for new electrical wiring in all rooms
Billeaud Hall (BLD)										
106 BLD	X	X	X	X			X	X		This room is a conference room, used as classroom frequently
113 BLD	X		X		X	x3	x		X	two small white board on each side of idea board, one 16' w-board replace chalk
122 BLD	X		X		X	X	X		X	Eliminate one chalk board, replace the other
Wharton Hall (VLW)										
416 VLW	X		X		X		X		X	Podium must be very small

b. Projected life time of enhancement:

AV equipment and the technology that supports it tends to improve and advance quickly. The estimates we propose here are conservative. The Department of Biology takes care of the equipment is has and we intend to continue to do so. Furthermore, we will be requiring all users of the AV equipment to document their training. This includes new faculty and graduate students. Based on our best practices we estimate that the computers will last 3 to 5 years before they need replacing. The projectors should last longer, 5 to 7 years. We estimate the life time of the idea boards and video conferencing equipment to vary greatly, dependent on its use 3 to 10 years. The electrical wiring and screens may last the life time of the building.

c. Person responsible for, implementation, installation, maintenance, operation and training:

Dr. Sherry Krayesky-Self has obtained a quote from GoMedia. This company will install the AV equipment. Dr. Sherry will prioritize the rooms for AV insulation and she will implement and oversee the project. She will design and help implement a plan for training all users of the AV equipment after it is installed. Training all users is meant to enhance the life time of the equipment by eliminating user error. Dr. William Schmidt is the online teaching expert in the Department of Biology. He will be beta testing each system after it is installed making sure it

meets the Departments needs. He will also help design and help lead the training required for each user. Dr. Sophie Plouvia currently over sees inventory in the Department of Biology. She will work with GoMedia to make sure all equipment is recorded to inventory and that any problems are reported to GoMedia and corrected. She will also coordinate and communicate with the Heather Birdsong who is the Department's AV maintenance person. Heather Birdsong will communicate with the STEP office about all maintenance issues involving this AV equipment. Drs. Beth Stauffer and Erin Sigel are invested users of room 122 BLD. This room will be one of the first equipped. These two will assist with beta testing the design we have requested. We will update and improve our precise plans for other rooms based on their findings. Collectively, we will quickly and efficiently finish all of the AV up-grades, without disturbing classes in session, within one year.

d. Justification:

The classes taught in the laboratories and classrooms we plan to equip with new AV equipment include, but are not limited to: Freshman Lab for majors' semester 1 and 2, Non-majors lab, Marine Botany, Plant physiology, Plant anatomy, Oceanography, Invertebrate biology, Microbiology, and Herpetology. Each of these classes / labs holds 10 to 30 students. These courses are taught every semester or every academic year. Most of these rooms house multiple courses, making them busy, high impact areas. The student's ability to see and interact with information is mandatory when learning biology. Currently the ability to see and interact is very limited. Effective equipment that includes digital projectors and podiums that will allow the use of visiting laptops and other digital equipment will improve the success of the thousands of students who use these rooms. The AV equipment in the smaller classrooms of our department has not been updated in years. In some cases there is not AV equipment. The University plans to increase interactive, research based experiences in all courses. We simply cannot do this without improved AV equipment.

Room 106 Billeaud is a conference room that is frequently used as a classroom. This room is used for senior and graduate level classes as well as student and faculty presentations and meetings of all types, academic and professional. The classes that meet in this room hold 10 to 20 students each and cover advanced topics. The ability to include live video visits from guest lecturers working at other universities would enhance the experience of our most advanced students. We can also use this capability during thesis and dissertation defenses. Currently, outside committee members are forced to Skype in on a laptop. Using a laptop limits the capability and possibilities of the event; furthermore, it does not represent the Department of Biology well. Video conferencing is an important tool that is mandatory for effective exchange of ideas.

The requested Idea Boards and digital projectors requested for rooms 113 and 122 BLD and 416 VLW will greatly enhance the curricula for a multitude of classes, 5-8 sections of second semester freshman biology lab, 3-6 section of non-majors biology lab, 6 ecology and systematic courses, molecular biology lab, molecular engineering, and laboratory for immunology, cancer biology, and advanced cell biology. The AV equipment requested for these rooms will directly benefit 400 biology majors and 75 non-biology majors annually (BIOL 113, 2nd semester lab for biology majors, multiple sections, BIOL 123 non-majors biology lab, multiple sections, BIOL437G

Experimental Design & Data Analysis, 15 students; BIOL 321 Entomology, 15 students; BIOL 360 Principles of Ecology, 15 students; BIOL 433G Plant Systematics, 16 students; BIOL 440 Estuarine Ecology and Marine Biology, 15 students; BIOL 461G Aquatic and Wetland Vascular Plants, 16 students). These technologies will allow for direct projection of live images of organismal details and dissections as well as the ability to annotate directly on the images. The Department has already acquired equipment that will capture the images, like an HD video camera-enable stereomicroscope (purchased in 2017 with STEP funds to Dr. Beth Stauffer) or new compound microscopes (purchased in 2018 with STEP funds to Dr. Sherry Krayesky). At present 113 BLD has a computer that sits on a cart with a projector next to it and a microscope on the other side. Images are projected on to a small, old screen that is positioned next to a chalk board. The cart takes up a lot of space in an already small room. 122 BLD has a traditional blackboard, a small screen and a projector that is sitting on a stack of plant presses. The system will project, but lacks the capability for the projection of microscope images at a large enough size and resolution for students at the back of the classroom. Room 416 in VLW does not have a projector or a computer. It has one small chalk board. The Idea boards, white boards and digital projectors will be invaluable for laboratory and lectures, allowing for the flexibility to have side-by-side display of power point slides and video, and for annotating lecture slides that can be uploaded to Moodle for students to study from.

Previously funded STEP grant are:

2018: STEP Grant: Acquisition of Autoclave for Billeaud Hall, Department of Biology: \$19,250.00 2017: STEP Grant: Compound Microscopes for Teaching Laboratories in the Department of Biology: \$126,973.27

2017: STEP Grant: Upgrading a Molecular Biology Teaching Lab: \$29,392.20 (replacing old molecular equipment in Wharton 416, Yi-Hong Wang & Sophie Plouviez)

2016: STEP Grant: Specialized research equipment is required for undergraduate research activity in marine biology (phycology/marine botany): \$34,675.00

2006: STEP Grant: Stereomicroscopes (Dissecting microscopes) for upper and lower division student laboratories in the Biology Department: \$181,253.40

2006: STEP Grant: Computers required for Biology Study Room-Computer Lab: \$8,744.00

2005: STEP Grant: Technological Enhancement of the Biology Freshman/Sophomore Laboratories:

\$80,899.00 (complete remodeling of laboratory room 115 in Billeaud hall)

Budget Proposal

1. Equipment	\$98,561.11 Computers: Standard Desktop Dell 3000 with Monitor Intel Core i5-8500 Processor (6 Cores/9MB/6T/up to 4.1GHz/65W) 8GB 1X8GB 2666MHz DDR4 UDIMM 256GB SATA Class 20 Solid State Drive 8x DVD+/-RW 9.5mm Optical Disk Drive 4 - USB 3.0 (2 front/2 rear), 4 - USB 2.0 (2 front/2 rear), Internal USB 2.0, RJ-45, Display Port 1.2, HDMI 1.4, 1 UAJ, 1 Line-out 5-year warranty Dell 23" Monitor with Dell Pro Stereo Soundbar Latest Windows OS Microsoft Office Sophos Security Suite \$965.00 each x 4 = \$3,860.00 For projectors, idea boards, white boards, screens etc [see attached quotes] Subtotal = \$94,701.11
2. Software	\$ 0.00
3. Supplies	\$ 0.00
4. Maintenance	\$ 0.00
5. Personnel	\$ 0.00
6. Other	1,000.00 per room x 4 = $4,000$ Electrical wiring will be required
TOTAL:	\$102,561.11

Room 106 BLD



Quote Number	UL Billeaud 108	
Company:	Univ of Louisiana	
Contact:	Sherry Krayesky	
Address		
City, St Zip	Lafayette, LA	
Date	07/10/19	

Scope of Work: Multimedia Room Note: Electical power and computers provided by university.

Qty.	Part #	Manufacturer	Description	Price Each	Extension
1	PT-VMZ50U	Panasonic	5000 WUXGA Lumen Lampless Projector	\$2,562.50	\$2,562.50
1	NET-FS108PNA	Netgear	8 Port Switch - 4 PoE	\$103.04	\$103.04
1	3071757	Ergotron	LX Desk Mount Tall pole	\$226.10	\$226.10
1	20877LS	Da-Lite	65" X 104" Electric Contour Screen	\$1,289.17	\$1,289.17
1	CMS440	Chief	Drop-Ceiling Projector Mount	\$111.67	\$111.67
1	CMS006	Chief	6" Extension Pole	\$15.75	\$15.75
1	RPMBU	Chief	Universal Projector Mount Bracket	\$220.00	\$220.00
1	PD-915R-PL	Middle Atlantic	9 Outlet Rack-Mount Power Bar	\$116.67	\$116.67
2	VT1	Middle Atlantic	1 Space Vented Rack Blank	\$13.89	\$27.78
2	VT2	Middle Atlantic	2 Space Vented Rack Blank	\$17.36	\$34.72
2	TW12	Middle Atlantic	Cable Mangement Straps	\$12.50	\$25.00
1	26-616-01	Extron	HDMI to DVI Adapter	\$27.78	\$27.78
1	60-1238-83	Extron	IN1608Xi Switcher 70v Amplifier	\$2,770.83	\$2,770.83
1	60-1271-13	Extron	DTP Receiver (HDMI)	\$326.39	\$326.39
1	60-600-02	Extron	MLC226IP Touch Panel	\$1,062.50	\$1,062.50
1	SMB113	Extron	3 Gang Mount box for MLC226	\$152.78	\$152.78
2	26-663-12	Extron	12' HDMI Ultra Series Cable	\$62.50	\$125.00
4	26-663-03	Extron	3' HDMI Ultra Series Cable	\$34.72	\$138.88
1	26-566-03	Extron	12' Micro VGA w/Audio Cable	\$45.83	\$45.83
1	42-141-03	Extron	2x2 Ceiling Speakers	\$347.22	\$347.22
1	70-1045-02	Extron	Cable Cubby 500	\$208.33	\$208.33
1	60-1384-01	Extron	Cable Cubby Power w/USB	\$270.83	\$270.83
1	Podium 26	Exact	26' Podium with Cable Cubby 500 Cutout	\$1.837.50	\$1,837.50
1	Logo Glass	Clarus	Custom Podium Logo	\$347.22	\$347.22
•	Logo Glass	West Penn	Oddom i Oddin Eogo	4017.22	VO IT LEE
75	254246AFBK1000	Wire	HDBaseT Certified Cat 6A Plenum Cable, 1ft	\$1.06	\$79.50
	2012107112111000	West Penn	The base of the base of the base of the	V55	V10.00
75	25225BBK1000	Wire	Plenum 16g Stranded, Unshielded Speaker Cable, 1 ft	\$0.25	\$18.75
	ZOZZODDITIOOO	West Penn	Tieram Tog Granded, Grisnieded Opeaner Gaisie, Tit	40.23	V10.75
75	D25430GY1000	Wire	Plenum 2p 22g, Individually Shielded Mic/Control Cable	\$0.44	\$33.00
,,,	D20100011000	*****	Tionam 2p 22g, marriadany officiaca mila control casic	40.44	\$00.00
1	BDP-S3700	Sony	Blu Ray Player	\$111.10	\$111.10
i -	TD2421	Viewsonic	24" Monitor	\$428.24	\$428.24
i -	PX-30	ELMO	Digital Document Camera	\$2,609.72	\$2,609.72
i -	AV/TL 1214BD	BMS	Document Camera Trey Lock	\$76.32	\$76.32
•	ATTE IEI-IOD	Divio	Document Camera Trey Lock	Ψ70.32	₩10.32
1	TesiraFORTE AI	Biamp	Audio Digital Signal Processor	\$1,804.17	\$1,804.17
<u>. </u>	999-6930-400	Vaddio	ZoomSHOT 30 Fixed Camera w/ Qmini system	\$2,206.11	\$2,206.11
.	PY9-00001	Microsoft	Wireless Keyboard and Mouse	\$47.17	\$47.17
i -	910-001-014-W	ClearOne	White Ceiling Microphone Array	V-77.17	\$525.08
•	310-001-014-11	Olcai Olic	Write Ceiling Microphone Array		\$323.00
		1		Parts	\$20,332.65
				Labor	\$6,120.00
				Shipping	\$0,120.00
				Project Subtotal	\$26,452.65
				Sales Tax	\$20,432.03
					\$26,452.65
				Project Total	\$20,452.05

Room 113 BLD



Quote Number	UL Billeaud 113
Company:	Univ of Louisiana
Contact:	Sherry Krayesky
Address	
City, St Zip	Lafayette, LA
Date	07/10/19

Scope of Work: Multimedia Room Note: Electical power and computers provided by university.

Qty.	Part #	Manufacturer	Description	Price Each	Extension
	V11H876520W	Epson	1470Ui w/Mount WUXGA Laser Projector	\$3,827.78	\$3,827.78
	NET-FS108PNA	Netgear	8 Port Switch - 4 PoE	\$103.04	\$103.04
	3071757	Ergotron	LX Desk Mount Tall pole	\$226.10	\$226.10
	25940T	Da-Lite	100" Diagonal Idea Board for Interactive Projector	\$1,048.61	\$1,048.61
	OFRBC-8R	Middle Atlantic	Overfloor Raceway Base and Cover - 8'	\$307.44	\$307.44
	OFR10A	Middle Atlantic	Overfloor Raceway Entrance End Fitting	\$78.51	\$78.51
	PD-915R-PL	Middle Atlantic	9 Outlet Rack-Mount Power Bar	\$116.67	\$116.67
	VT1	Middle Atlantic	1 Space Vented Rack Blank	\$13.89	\$27.78
	VT2	Middle Atlantic	2 Space Vented Rack Blank	\$17.36	\$34.72
)	TW12	Middle Atlantic	Cable Mangement Straps	\$12.50	\$25.00
	26-616-01	Extron	HDMI to DVI Adapter	\$27.78	\$27.78
	60-1238-83	Extron	IN1608Xi Switcher 70v Amplifier	\$2,770.83	\$2,770.83
	60-1271-13	Extron	DTP Receiver (HDMI)	\$326.39	\$326.39
	60-600-02	Extron	MLC226IP Touch Panel	\$1,062.50	\$1,062.50
	SMB113	Extron	3 Gang Mount box for MLC226	\$152.78	\$152.78
2	26-663-12	Extron	12' HDMI Ultra Series Cable	\$62.50	\$125.00
1	26-663-03	Extron	3' HDMI Ultra Series Cable	\$34.72	\$138.88
	26-566-03	Extron	12' Micro VGA w/Audio Cable	\$45.83	\$45.83
	42-141-03	Extron	2x2 Ceiling Speakers	\$347.22	\$347.22
	70-1045-02	Extron	Cable Cubby 500	\$208.33	\$208.33
	60-1384-01	Extron	Cable Cubby Power w/USB	\$270.83	\$270.83
	D F 00	-			
	Podium 26	Exact	26' Podium with Cable Cubby 500 Cutout	\$1,837.50	\$1,837.50
	Logo Glass	Clarus	Custom Podium Logo	\$347.22	\$347.22
		West Penn			
75	254246AFBK1000	Wire	HDBaseT Certified Cat 6A Plenum Cable, 1ft	\$1.06	\$79.50
_		West Penn		V	V. 0.00
5	25225BBK1000	Wire	Plenum 16g Stranded, Unshielded Speaker Cable, 1 ft	\$0.25	\$18.75
_		West Penn		4	
75	D25430GY1000	Wire	Plenum 2p 22g, Individually Shielded Mic/Control Cable	\$0.44	\$33.00
	DDD 02700	0.000	Dis Des Dieses	C444 40	6444.40
1	BDP-S3700	Sony	Blu Ray Player	\$111.10	\$111.10
	TD2421	Viewsonic	24" Monitor	\$428.24	\$428.24
)	WB School	Norwood	8' X 4' White Board	\$416.67	\$833.34
	PX-30	ELMO	Digital Document Camera	\$2.609.72	\$2.609.72
<u> </u>	AV/TL 1214BD	BMS	Document Camera Trey Lock	\$76.32	\$76.32
	7.17.12.1400	D.I.IO	Document Carrott Trey Look	\$10.0Z	Ç10.02
				Parts	\$17.646.7

 Parts
 \$17,646.71

 Labor
 \$5,270.00

 Shipping
 \$0.00

 Project Subtotal
 \$22,916.71

 Sales Tax
 \$0.00

 Project Total
 \$22,916.71

Room 122 BLD



Quote Number	UL Billeaud 122
Company:	Univ of Louisiana
Contact:	Sherry Krayesky
Address	
City, St Zip	Lafayette, LA
Date	07/10/19

Scope of Work: Multimedia Room Note: Electical power and computers provided by university.

Otv	Part #	Manufacturer	Description	Price Each	Extension
1	V11H876520W	Epson	1470Ui w/Mount WUXGA Laser Projector	\$3.827.78	\$3.827.78
<u>i</u>	NET-FS108PNA	Netgear	8 Port Switch - 4 PoE	\$103.04	\$103.04
1	3071757	Ergotron	LX Desk Mount Tall pole	\$226.10	\$226.10
i	25940T	Da-Lite	100" Diagonal Idea Board for Interactive Projector	\$1,048.61	\$1,048.61
i	OFRBC-8R	Middle Atlantic	Overfloor Raceway Base and Cover - 8'	\$307.44	\$307.44
1	OFR10A	Middle Atlantic	Overfloor Raceway Entrance End Fitting	\$78.51	\$78.51
1	PD-915R-PL	Middle Atlantic		\$116.67	\$116.67
2	VT1		1 Space Vented Rack Blank	\$13.89	\$27.78
2	VT2	Middle Atlantic	2 Space Vented Rack Blank	\$17.36	\$34.72
2	TW12	Middle Atlantic	Cable Mangement Straps	\$12.50	\$25.00
1	26-616-01	Extron	HDMI to DVI Adapter	\$27.78	\$27.78
1	60-1238-83	Extron	IN1608Xi Switcher 70v Amplifier	\$2.770.83	\$2.770.83
1	60-1271-13	Extron	DTP Receiver (HDMI)	\$326.39	\$326.39
i	60-600-02	Extron	MLC226IP Touch Panel	\$1,062.50	\$1,062.50
<u>i</u>	SMB113	Extron	3 Gang Mount box for MLC226	\$152.78	\$152.78
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i	26-566-03	Extron	12' Micro VGA w/Audio Cable	\$45.83	\$45.83
<u>i</u>	42-141-03	Extron	2x2 Ceiling Speakers	\$347.22	\$347.22
1	70-1045-02	Extron	Cable Cubby 500	\$208.33	\$208.33
1	60-1384-01	Extron	Cable Cubby Power w/USB	\$270.83	\$270.83
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1	Podium 26	Exact	26' Podium with Cable Cubby 500 Cutout	\$1,837.50	\$1.837.50
1	Logo Glass	Clarus	Custom Podium Logo	\$347.22	\$347.22
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		West Penn			
75	254246AFBK1000	Wire	HDBaseT Certified Cat 6A Plenum Cable, 1ft	\$1.06	\$79.50
	ZO IZ IOI II DICIOGO	West Penn	Tibbaco Toctanoa cat of thioram cable, in	V 1.50	770.00
75	25225BBK1000	Wire	Plenum 16g Stranded, Unshielded Speaker Cable, 1 ft	\$0.25	\$18.75
		West Penn	remaining strainage, cristianage operator outro, 11t	40.20	73.75
75	D25430GY1000	Wire	Plenum 2p 22g, Individually Shielded Mic/Control Cable	\$0.44	\$33.00
1	BDP-S3700	Sony	Blu Ray Player	\$111.10	\$111.10
1	TD2421	Viewsonic	24" Monitor	\$428.24	\$428.24
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2	WB School	Norwood	8' X 4' White Board	\$416.67	\$833.34
1	PX-30	ELMO	Digital Document Camera	\$2,609.72	\$2,609.72
1	AV/TL 1214BD	BMS	Document Camera Trey Lock	\$76.32	\$76.32
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Parts	\$17,646.71
Labor	\$5,270.00
Shipping	\$0.00
Project Subtotal	\$22,916.71
Sales Tax	\$0.00
Project Total	\$22,916.71

Room 416 VLW



Quote Number	UL Wharton 416	
Company:	Univ of Louisiana	
Contact:	Sherry Krayesky	
Address		
City, St Zip	Lafayette, LA	
Date	07/10/19	

Scope of Work: Multimedia Room Note: Electical power and computers provided by university.

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1	25940T	Da-Lite	100" Diagonal Idea Board for Interactive Projector	\$1,048.61	\$1,048.61
1	OFRBC-8R	Middle Atlantic	Overfloor Raceway Base and Cover - 8'	\$307.44	\$307.44
1	OFR10A	Middle Atlantic	Overfloor Raceway Entrance End Fitting	\$78.51	\$78.51
1	PD-915R-PL	Middle Atlantic	9 Outlet Rack-Mount Power Bar	\$116.67	\$116.67
2	VT1	Middle Atlantic	1 Space Vented Rack Blank	\$13.89	\$27.78
2	VT2		2 Space Vented Rack Blank	\$17.36	\$34.72
2	TW12	Middle Atlantic	Cable Mangement Straps	\$12.50	\$25.00
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1	Logo Glass	Clarus	Custom Podium Logo	\$347.22	\$347.22
		West Penn			
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		West Penn	·		
75	25225BBK1000	Wire	Plenum 16g Stranded, Unshielded Speaker Cable, 1 ft	\$0.25	\$18.75
		West Penn			
75	D25430GY1000	Wire	Plenum 2p 22g, Individually Shielded Mic/Control Cable	\$0.44	\$33.00
1	BDP-S3700	Sony	Blu Ray Player	\$111.10	\$111.10
1	TD2421	Viewsonic	24" Monitor	\$428.24	\$428.24
1	WB School	Norwood	8' X 4' White Board	\$416.67	\$416.67
1	PX-30	ELMO	Digital Document Camera	\$2,609.72	\$2,609.72
1	AV/TL 1214BD	BMS	Document Camera Trey Lock	\$76.32	\$76.32
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	•	•	•	Darte	\$17 230 04

 Parts
 \$17,230.04

 Labor
 \$5,185.00

 Shipping
 \$0.00

 Project Subtotal
 \$22,415.04

 Sales Tax
 \$0.00

 Project Total
 \$22,415.04