Division of Academic Affairs Technology Fee – Project Proposal 2015

Proposal Deadline: Wednesday, January 21, 2015

Project Proposal Type

Systemic Project

Projects proposed by operational units of the university (e.g., colleges, academic departments, Library, etc.) for instructional technology enhancements of unit-wide or university-wide scope.

All Systemic Project proposals must be acknowledged (signed) by the operational unit head (e.g. Dean, Chair, Director, etc.).

Project Title

Upgrade Instructional Videoconferencing Classrooms Over Two Years

An ITS proposal in support of the Colleges and the Emerald Coast Campus.

Total Amount of Funding Requested

\$404,000 over two years: \$202,000 in 2015 \$202,000 in 2016

Primary Project Coordinator

Sandra Thompson, Director of IT Operations

Unit Head Acknowledgment

Division of Academic Affairs Systemic Project Proposal Template 2015

Systemic proposals must provide the following information:

1. Description of initiative/investment to enhance instructional technology.

This is an ITS proposal in support of our role of supporting classroom instructional technology for UWF's academic colleges and the Emerald Coast Campus. Various academic programs at UWF rely on instructional videoconferencing classrooms to deliver distance education to students at sites such as the Emerald Coast Campus, Gulf Coast State College, and elsewhere. These classrooms are costly (on average costing \$80K - \$100K each to refresh) and are not included in the current classroom technology refresh funding. The backbone of UWF's instructional videoconferencing classrooms are now 5+ years old and the equipment is becoming increasingly problematic. Additionally, UWF is vacating the REEF facility at the end of Spring Term 2015 and is relocating Electrical & Computer Engineering programs there to the Emerald Coast joint campus.

ITS has received several requests to update distance learning classrooms and to equip additional distance learning classrooms at the Emerald Coast. However, examination of course schedules for the last few terms (see Appendix A) shows that classroom 7/701 on the Fort Walton Beach campus is used by only a single course one night per week. This may be due to the extreme age of the technology in that room, which was originally located at the Combs Campus, but it is clear that this room has ample capacity to assume the ECE course load being relocated from REEF.

Further, looking at the course schedules for FWB 7/703 and it's companion room 4/305 on the Pensacola campus shows that these rooms are being used mostly for non-distance-learning courses. These data lead us to believe that, while the aging equipment in these rooms is problematic, the current inventory of two distance learning rooms at the Emerald Coast campus is sufficient. Given the extreme cost of the distance learning classrooms, we recommend that UWF should not over-build infrastructure in this area of instructional technology.

Based on the REEF move, equipment age, and course scheduling, we therefore recommend that these two pairs of Emerald Coast/Pensacola classrooms – FWB 7/701 and Pensacola 4/205 (the "engineering classrooms"), and FWB 7/703 with Pensacola 4/305 – should be upgraded over the next two summers. The engineering classrooms are highest need, due to the REEF move, and are proposed for upgrade in Summer 2015. The other pair is proposed for upgrade in Summer 2016.

2. Description of how initiative has a college/unit-wide or university-wide scope. These four classrooms are generally-scheduled (Registrar-scheduled) rooms (although two are primarily used by Electrical & Computer Engineering). A variety of academic departments in all four colleges have utilized these rooms, as shown by the room

scheduling information in Appendix A. Most often, the rooms on Pensacola main campus connect to the Emerald Coast campus, but there are instances where classes are conducted with other institutions such as Gulf Coast State College.

3. Description of project alignment with UWF Strategic Plan.

This proposal supports UWF strategic goals 1.1, 1.2, and 1.3.

4. Description of benefits provided.

The most important benefit will be the increased reliability and quality of distance learning instruction. It is also important that the rooms match each other in similar equipment for optimal performance and functioning and ease of use by instructors and facilitators.

5. Description of how success/impact will be measured.

Ongoing productive utilization of these rooms by courses in various academic programs will be the primary measure of success, combined with satisfaction feedback from instructors and students

6. Detailed description of resources required including hardware and software requirements and personnel costs (faculty compensation is not an allowed cost).

Distance learning technology requires specific hardware that allows for real-time transmission of the video and audio from one location to the other. This includes sending the images and audio of the instructor, students as well as presentation materials back and forth between the sites in real time. The proposal includes replacing the hardware and software and covers the installation and programming needed to ensure that the equipment is optimally configured for consistency as well as to allow for remote troubleshooting when needed. The attached quote provides a detailed list of the specific items needed. This quote is for estimation purposes; depending upon the outcome of an upcoming classroom technology RFP, a different vendor may be selected for this project.

We propose instructional videoconferencing eClassroom installation in accord with UWF classroom technology standards. A special consideration involves the two rooms in Building 4 on the Pensacola main campus, which are currently configured for non-standard rear-projection technology. This proposal includes estimated costs of installing new drywall to re-configure the rooms for our standard ceiling-mounted front-projection configuration.

Summer 2015 – Engineering Classrooms

Pensacola Room 4/205	
Equipment and installation	\$87,000
Estimated 3-year maintenance contract	\$21,000
Drywall and room reconfiguration	<u>\$4,000</u>
	\$112,000
Contingency	\$5,000
Total 2015 Cost:	\$202,000
Summer 2016 – General Classrooms	\$202,000
Summer 2016 – General Classrooms Emerald Coast Room 7/703	
Summer 2016 – General Classrooms Emerald Coast Room 7/703 Equipment and installation	\$67,000
Summer 2016 – General Classrooms Emerald Coast Room 7/703	\$67,000 <u>\$18,000</u>
Summer 2016 – General Classrooms Emerald Coast Room 7/703 Equipment and installation	\$67,000

\$112,000 Contingency

Total 2016 Cost: \$202,000

Total Two-Year Project Cost: \$404,000

Estimated 3-year maintenance contract

Drywall and room reconfiguration

Pensacola Room 4/305

Equipment and installation

As usual, any unspent contingency funds and savings will be returned to the Technology Fee Committee.

\$87,000

\$21,000 \$4,000

\$5,000

7. Proposed timeline.

We plan for the first classroom upgrades to occur during Summer Term 2015, and the second set in Summer 2016. Equipment installation must be coordinated with the Registrar in order to have the least impact on scheduling distance learning instruction. Typically, the best time for this would be during the Summer Semester (May-August). This would allow for the time needed for proper installation, verification that it is functioning, and any training needed for new faculty who would be scheduled to teach in these locations.

8. Plan for sustainability beyond conclusion of funding from technology fee, if applicable.

ITS has classroom technology support staff with a prioritized response time for providing timely assistance, and works with Emerald Coast staff to assist with training needs and remote troubleshooting. This proposal includes projected costs of a three-year on-site maintenance contract on these rooms. ITS is working on models to merge long-term renewal/replacement funding for instructional videoconferencing classrooms into the classroom refresh project, which currently includes only standard eClassrooms.

9. Resource matching commitments from other organizations/sources (identify organization and amounts), if applicable.

None.

10. Individual responsible for reporting and accountability, along with contact information.

Michael Dieckmann, CIO mdieckma@uwf.edu, 850-474-2558

Appendix A

Use of Distance Learning Classrooms FWB 7/701 and 7/703 and Pensacola 4/205 and 4/305

In Spring Term 2015

Following schedule is for the engineering classroom at the REEF. Course scheduling shows it is used almost exclusively in distance learning mode with its partner Pensacola classroom 4/205.

TermCourse LevelCollegeDepartmentInstructorCampusSection StatusEnrollment percentage201501AllAllElectrical & Computer EngineerAllMultiple ValuesActive0% to 200%

Bldg & Room Include Continuing Education
Multiple Values Multiple Values

Offerings

Campus

Department	Course	Course Title	Section CRN	Credit Hours	Instructor	Part of Term	Bldg & Room	Enrollment percentage	Course Limit	Enrollment	Seats Available	Restricted Seats Available	Restricted Seats	Class Start date	Meeting Day & Time	Main (Pensaco	REEF (Emerald Coast)
Electrical & Computer	EEE3308	Electronic Ckts I	10039	3	Shaer Bassam	Full Term	0004 , 0205	80%	44	35	9			01/06/2015	MW 5:30 PM - 6:45 PM	✓	
Engineer			10040	3	Shaer Bassam	Full Term	R520 , 0118	50%	20	10	10			01/06/2015	MW 5:30 PM - 6:45 PM		✓
	EEE4306	Electronic Ckts II	10041	3	Bakhoum Ezzat	Full Term	0004 , 0205	95%	44	42	2			01/06/2015	TR 2:30 PM - 3:45 PM	✓	
			10042	3	Bakhoum Ezzat	Full Term	R520 , 0118	40%	20	8	12			01/06/2015	TR 2:30 PM - 3:45 PM		✓
	EEL3111	Circuits I	10048	3	Gilbar Thomas	Full Term	0004 , 0205	102%	44	45	-1			01/06/2015	MW 9:30 AM - 10:45 AM	✓	
			10049	3	Gilbar Thomas	Full Term	R520 , 0118	25%	20	5	15			01/06/2015	MW 9:30 AM - 10:45 AM		✓
	EEL3112	Circuits II	10050	3	Fuchs Andreas	Full Term	0004 , 0205	86%	44	38	6			01/06/2015	MW 1:00 PM - 2:15 PM	✓	
			10051	3	Fuchs Andreas	Full Term	R520,0118	55%	20	11	9			01/06/2015	MW 1:00 PM - 2:15 PM		✓
	EEL3135	Signals And Systems	10055	3	Fuchs Andreas	Full Term	0004 , 0205	66%	44	29	15			01/06/2015	MW 11:00 AM - 12:15 PM	✓	
			10056	3	Fuchs Andreas	Full Term	R520 , 0118	60%	20	12	8			01/06/2015	MW 11:00 AM - 12:15 PM		✓
	EEL3472	Electromag Fields I	10057	3	Bakhoum Ezzat	Full Term	0004 , 0205	100%	44	44	0			01/06/2015	TR 5:30 PM - 6:45 PM	✓	
			10061	3	Bakhoum Ezzat	Full Term	R520,0118	100%	20	20	0			01/06/2015	TR 5:30 PM - 6:45 PM		✓
	EEL3701	Dig Logic & Comp Sys	10062	3	Gilbar Thomas	Full Term	0004 , 0205	86%	44	38	6			01/06/2015	MW 4:00 PM - 5:15 PM	✓	
			10063	3	Gilbar Thomas	Full Term	R520, 0118	16%	44	7	37			01/06/2015	MW 4:00 PM - 5:15 PM		✓
	EEL4213	Elec Energy Sys 1	10067	3	Ramachandran Bhuvaneswari	Full Term	R520, 0118	20%	20	4	16			01/06/2015	TR 1:00 PM - 2:15 PM		✓
			10068	3	Ramachandran Bhuvaneswari	Full Term	0004 , 0205	64%	44	28	16			01/06/2015	TR 1:00 PM - 2:15 PM	✓	
	EEL4514	Commo Systems & Comp	10070	3	Bakhoum Ezzat	Full Term	0004 , 0205	32%	44	14	30			01/06/2015	TR 11:00 AM - 12:15 PM	✓	
			10071	3	Bakhoum Ezzat	Full Term	R520 , 0118	15%	20	3	17			01/06/2015	TR 11:00 AM - 12:15 PM		✓
	EEL4657 L	Linear Control Sys	10074	3	Ramachandran Bhuyaneswari	Full Term	0004 , 0205	98%	44	43	1			01/06/2015	TR 4:00 PM - 5:15 PM	✓	
			10075	3	Ramachandran Bhuvaneswari	Full Term	R520 , 0118	50%	20	10	10			01/06/2015	TR 4:00 PM - 5:15 PM		✓
	EEL4713	Dig Computer Arch	10079	3	Shaer Bassam	Full Term	0004 , 0205	23%	44	10	34			01/06/2015	MW 2:30 PM - 3:45 PM	✓	
			10080	3	Shaer Bassam	Full Term	R520 , 0118	5%	20	1	19			01/06/2015	MW 2:30 PM - 3:45 PM		√
	EEL4744	Microprocessor App	10081	3	Khabou Mohamed	Full Term	0004 , 0205	70%	44	31	13			01/06/2015	TR 9:30 AM - 10:45 AM	✓	
			10082	3	Khabou Mohamed	Full Term	R520, 0118	30%	20	6	14			01/06/2015	TR 9:30 AM - 10:45 AM		√
	EEL4834	Prog For Engineers	10086	3	Russel Sam	Full Term	0004 , 0205	100%	44	44	0			01/06/2015	TR 7:00 PM - 8:15 PM	√	
			10087	3	Russel Sam	Full Term	R520 , 0118	55%	20	11	9			01/06/2015	TR 7:00 PM - 8:15 PM		√
	EGM4313	Interm Engr Analysis	10098	3	Touma Jimmy	Full Term	0004 , 0205	80%	44	35	9			01/06/2015	TR 8:00 AM - 9:15 AM	√	
			10099	3	Touma Jimmy	Full Term	R520 , 0118	25%	20	5	15			01/06/2015	TR 8:00 AM - 9:15 AM		√
	EGN3204	ENG Soft Tools	10100	1	Fuchs Andreas	Full Term	0004 , 0205	93%	44	41	3			01/06/2015	W 8:00 AM - 9:15 AM	✓	
			10101	1	Fuchs Andreas	Full Term	R520 , 0118	40%	20	8	12			01/06/2015	W 8:00 AM - 9:15 AM	•	~
	EGN4950	Capstone Design I	10104	1	Rashid Muhammad	Full Term	0004 , 0205	43%	30	13	17			01/06/2015	F 8:00 AM - 9:15 AM	√	_
			10105	1	Rashid Muhammad	Full Term	R520 , 0118	15%	20	3	17			01/06/2015	F 8:00 AM - 9:15 AM	•	~
	EGN4952L	Cap Des II	10103	2	Rashid Muhammad	Full Term	0004 , 0205	100%	28	28	0			01/06/2015	F 9:30 AM - 12:15 PM	√	-
	_0	p 500	10100	2	Rashid Muhammad	Full Term	R520 , 0118	60%	5	3	2			01/06/2015	F 9:30 AM - 12:15 PM	*	~
	EIN4354	Engineering Economy	10109	3	Mando Abdul	Full Term	0004 , 0205	61%	44	27	17			01/06/2015	MW 7:00 PM - 8:15 PM		-
	LINTOOT	Engineening Economy									4					✓	
			10103	3	Mando Abdul	Full Term	R520, 0118	80%	20	16	4			01/06/2015	MW 7:00 PM - 8:15 PM		✓

According to the following schedule, room 7/701 at the Emerald Coast Campus supports only one course taught on Wednesday nights. The companion Pensacola room for this course is a distance learning classroom in the College of Business.

Term 201501 Course Level All College All Instructor All College All Instructor All College FWB (Emerald College) Section Status Active College FWB (Emerald College) Secti

Offerings

Campus

Department	Course	Course Title	Section CRN	Credit Hours	Instructor	Part of Term	Bldg & Room	Enrollment percentage	Course Limit	Enrollment	Seats Available	Restricted Seats Available	Restricted Seats	Class Start	Meeting Day & Time	FWB (Emerald Coast)
Management & MIS	MAN3025	Mgt Fundamentals	11562	3	Miller David	Full Term	F007 , 0701	62%	45	28	17			01/06/2015	W 5:30 PM - 8:15 PM	✓

The following course schedules show room 4/305 being used for only two distance learning courses in Spring Term 2015. Fall Term 2014 data is similar, showing three distance learning courses hosted in that room.

Room 7/703 at Emerald Coast is supporting only four courses in Spring Term 2015. In Fall Term 2014 it supported a total of seven courses. No Friday courses are scheduled in that room in either semester.

TermCourse LevelCollegeDepartmentInstructorCampusSection StatusEnrollment percentage201501AllAllMultiple ValuesAllMultiple ValuesActive0% to 200%

Bldg & Room Include Continuing Education
Multiple Values Multiple Values

Offerings

Campus

Department	Course	Course Title	Section CRN	Credit Hours	Instructor	Part of Term	Bldg & Room	Enrollment percentage	Course Limit	Enrollment	Seats Available	Restricted Seats Available	Restricted Seats	Class Start date	Meeting Day & Time	FWB (Emerald Coast)	Main (Pensacola)
Computer Science	COP3014	Algorithm and Program Design	10356	3	Kalaimannan Ezhil Selvam	Full Term	0004 , 0305	100%	30	30	0			01/06/2015	TR 9:30 AM - 10:45 AM		✓
	COP3530	Data Structures & Algorithms I	10374	3	Reichherzer Thomas	Full Term	0004 , 0305	73%	30	22	8			01/06/2015	M 6:00 PM - 8:45 PM		✓
	COP4534	Data Str And Alg II	10360	3	Coffey John	Full Term	0004 , 0305	74%	35	26	9			01/06/2015	MW 2:30 PM - 3:45 PM		✓
	COP4635	Sys & Net II	10372	3	Reichherzer Thomas	Full Term	0004 , 0305	103%	35	36	-1			01/06/2015	MW 4:00 PM - 5:15 PM		✓
	COT4420	Theory Computation	10348	3	Owsnicki-Klewe Bernd	Full Term	0004 , 0305	90%	30	27	3			01/06/2015	TR 4:00 PM - 5:15 PM		✓
Electrical & Computer Engineer	EGM2500	Engr Mech Statics	10093	2	Lamar David	Full Term	0004 , 0305	70%	44	31	13			01/06/2015	TR 2:30 PM - 3:45 PM		✓
Hospitality, Rec & Resort Mgmt	HFT4274	Cond / Vac Interval Ownership	10134	3	Holdnak Andrew	Full Term	0004 , 0305	80%	35	28	7			01/06/2015	TR 1:00 PM - 2:15 PM		✓
resort ingine		Ownership	10135	3	Holdnak Andrew	Full Term	F007,0703	26%	35	9	26			01/06/2015	TR 1:00 PM - 2:15 PM	✓	
	LEI4332	Comm Tourism Dev	10119	3	Holdnak Andrew	Full Term	0004 , 0305	46%	35	16	19			01/06/2015	TR 11:00 AM - 12:15 PM		✓
			10120	3	Holdnak Andrew	Full Term	F007,0703	20%	35	7	28			01/06/2015	TR 11:00 AM - 12:15 PM	✓	
Management & MIS	MAN3550	Intro To Mgt Science	11579	3	Reid Randall	Full Term	F007,0703	20%	15	3	12			01/06/2015	W 6:00 PM - 8:45 PM	✓	
Marketing & Economics	ECO3223	Money And Banking	11735	3	Schmerbeck Aaron	Full Term	F007,0703	40%	25	10	15			01/06/2015	R 5:30 PM - 8:15 PM	✓	
Mathematics & Statistics	MAC1105	College Algebra	11141	3	Dickinson Ross	Full Term	0004 , 0305	100%	45	45	0			01/06/2015	MW 1:00 PM - 2:15 PM		✓
outistics	MAC1114	Trigonometry	11145	3	Bushway Lucia	Full Term	0004 , 0305	109%	45	49	-4			01/06/2015	TR 8:00 AM - 9:15 AM		✓
			11148	3	Whitfield Gregory	Full Term	0004 , 0305	102%	45	46	-1			01/06/2015	MWF 11:00 AM - 11:50 AM		✓
	MAC2311	Anlytc Geom/Cal I	11156	4	Bushway Lucia	Full Term	0004 , 0305	98%	40	39	1			01/06/2015	MWF 9:30 AM - 10:40 AM		✓

Appendix B

Instructional Videoconferencing Equipment Quote



Audio Visual Proposal

Date Reference # 12/29/14 G05652

University of West Florida Sandra Thompson 11000 University Pkwy Pensacola, FL 32514-5732

Account Representative:

Susan Caine

Phone: 850-449-0627 Fax: 205.985.4756

Mobile:

E-Mail: scaine@technical-innovation.com

Re: UWF BLDG 4 RM 305 ,BLDG 7 RM 701 AND 703 DISTANCE LEARNING

#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
				Ft. Walton 7-701		
1	1	D&M	DBT-3313UDCIP	Universal Blu-ray DVD/CD Player with RS232, BD Reg. A, DVD Reg. 1	\$843.37	\$843.37
2	1	NEC PSP GOVT/EDUCATION	N**NP-PA672W-13ZL	NP-PA672W with NP13ZL lens. Bundle includes PA672W projector and NP13ZL lens.	\$2,866.45	\$2,866.45
3	1	Dalite	TBD	CONTOUR ELECTROL WALL MOUNTED ELECTRIC SCREEN	\$1,126.50	\$1,126.50
4	1	Tech Ops	OFE	Owner-furnished equipment - Two Displays (Optional)	\$0.00	\$0.00
5	2	Chief Manufacturing	LTMU	LARGE, HEIGHT ADJUSTABLE, TILT MOUNT	\$204.65	\$409.30
6	1	Smart Education	SP518-NB	SMART Podium 518 interactive pen display with SMART Notebook software used FOR ANNOTATION AND PREVIEW ONF ANY SELECTED SOURCE	\$2,029.00	\$2,029.00



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
7	1	Smart Education	SDC-450	SMART Document Camera 450	\$799.00	\$799.00
8	2	Extron	60-1271-13	HDMI Twisted Pair Receiver - 230 feet (70 m)	\$286.59	\$573.18
9	2	Extron	60-1271-12	HDMI Twisted Pair Transmitter - 230 feet (70 m)	\$286.59	\$573.18
10	1	Crestron	DMPS3-300-C	3-Series® DigitalMedia™ Presentation System 300	\$4,772.73	\$4,772.73
11	2	Crestron	DM-RMC-SCALER-C	DigitalMedia 8G+™ Receiver & Room Controller w/Scaler	\$823.53	\$1,647.06
12	2	Crestron	DM-TX-201-C	DigitalMedia 8G+™ Transmitter 201	\$764.71	\$1,529.42
13	2	Crestron	HD-SCALER	High-Definition Video Scaler	\$588.24	\$1,176.48
14	2	Extron	60-1271-13	HDMI Twisted Pair Receiver - 230 feet (70 m)	\$286.59	\$573.18
15	1	Extron	60-1437-01	HDMI to Four Output DTP Twisted Pair Distribution Amplifier - 230 feet (70 m)	\$1,701.22	\$1,701.22
16	2	Extron	60-1271-13	HDMI Twisted Pair Receiver - 230 feet (70 m)	\$286.59	\$573.18
17	2	Extron	60-1271-12	HDMI Twisted Pair Transmitter - 230 feet (70 m)	\$286.59	\$573.18
18	1	Tech Ops	OFE	Owner-furnished equipment - Two Bose 70V Speakers (Optional)	\$0.00	\$0.00
				VTC		
19	1	Cisco	CTS-SX80-IP60-K9	IntPkg SX80 - Camera and touch 10	\$12,450.00	\$12,450.00
20	1	Cisco	CTS-CAM-P60=	Cisco Telepresence Precision 6	\$4,450.00	\$4,450.00
21	1	Cisco	PSU-12VDC-40W=	Power Supply	\$110.60	\$110.60
22	1	Cisco	PWR-CORD-US-A=	Pwr Cord US 1.8m Black YP-12 To YC-12	\$0.00	\$0.00
23	1	Tech Ops			\$0.00	\$0.00



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
			OFE	Owner-furnished equipment - Audio Science Ceiling Microphone (Optional)		
24	2	Cisco	CTS-CAM60-BRKT	Bracket for mounting of Precision 60 Camera	\$128.13	\$256.26
25	1	Tech Ops (ZZZZZZ)	*SVC-HD	For Cisco gear Remote Help Desk Services, Toll Free Help Desk Support, Manufacturer RMA Facilitation	\$2,601.43	\$2,601.43
				Control		
26	1	Crestron	TPMC-9-B-T	9" Tilt Touch Screen, Black Textured; includes TPS-6X-IMCW & PW-2407WU	\$2,235.29	\$2,235.29
27	1	Netgear	GS108P-100NAS	NETGEAR ProSafe GS108P 8-port 10/100/1000 Gigabit Switch with 4-port PoE - Switch - 8 x 10/100/1000 - desktop - PoE	\$221.95	\$221.95
				Hardware		
28	1	Tech Ops	OFE	Owner-furnished equipment - Lectern (Optional)	\$0.00	\$0.00
29	1	Middle Atlantic Products	Rack	Equipment Rack - ~25 Space	\$731.00	\$731.00
30	2	Middle Atlantic	UTR1	HALF/THIRD RACK UNIVERSAL SHELF	\$24.10	\$48.20
31	1	Extron	60-1471-13	Twisted Pair Extender for USB Peripherals	\$420.73	\$420.73
32	1	Extron	60-1471-12	Twisted Pair Extender for USB Peripherals	\$420.73	\$420.73
33	1	Cables to Go	40367	Velocityandtrade; DVI-Dandtrade; Male to HDMI(R) Female Inline Adapter	\$9.66	\$9.66
34	2	Crestron	CBL-HD-DVI-12	Crestron® Certified HDMI® to DVI Interface Cable, 12 ft	\$37.06	\$74.12
35	3	Crestron	CBL-HD-DVI-6	Crestron® Certified HDMI® to DVI Interface Cable, 6 ft	\$26.47	\$79.41
36	7	Crestron			\$21.18	\$148.26



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
			CBL-HD-3	Crestron® Certified HDMI® Interface Cable, 3 ft		
37	5	Crestron	CBL-HD-6	Crestron® Certified HDMI® Interface Cable, 6 ft	\$26.47	\$132.35
38	1	Crestron	CBL-HD-12	Crestron® Certified HDMI® Interface Cable, 12 ft	\$41.18	\$41.18
39	1	Crestron	CBL-VGA-AUD-12	Crestron® Certified Computer VGA Interface Cable w/Audio, 12 ft	\$31.76	\$31.76
40	2	Crestron	CBL-DVI-6	Crestron® Certified DVI-D Interface Cable, 6 ft	\$24.35	\$48.70
41	3	Milestone	PACPC1	POWER CONDITIONER ACCESSORY	\$113.31	\$339.93
42	1	APC	AP7900	APC Rack PDU, Switched, 1U, 15A 100/120V	\$477.71	\$477.71
43	1	APC	LE1200	APC Line-R 1200VA Automatic Voltage Regulator	\$51.81	\$51.81
				Ft. Walton 7-701 Services		
44	32	Tech Ops	ENGINEERING	Includes system design, testing/setting of system, etc.	\$100.00	\$3,200.00
45	30	Tech Ops	PROGRAMMING	Includes all programming of the control system to provide a finished product of controlling your A/V System.	\$100.00	\$3,000.00
46	12	Tech Ops	PROJECT MANAGEMENT	Includes all required construction and installation coordination.	\$85.00	\$1,020.00
47	16	Tech Ops	PRE-INSTALL	Includes all fabrication, modification, assembly, rack wiring, etc. prior to on-site installation.	\$65.00	\$1,040.00
48	112	Tech Ops	INSTALLATION	Includes all on-site installation, wiring, coordination, supervision, testing, and system check-out.	\$65.00	\$7,280.00
49	1	Tech Ops	TRAINING	System operational training for normal usage and trouble-shooting including basic operator's "one page cheat sheet", and equipment cd's.	\$85.00	\$85.00
50	1	Tech Ops			\$2,800.00	\$2,800.00



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
			HARDWARE	Includes cabling, connectors, labeling, unistrut, vented plates, terminal strips, lacing bars, etc.		
51	1	Tech Ops	G&A	Includes all applicable Freight, Insurance, Permits, and Licenses as may be required by law.	\$1,849.99	\$1,849.99
				SubTotal		\$67,422.50
				OPTIONAL		
52	1	Tech Ops	*SVC-SLV	One-Year on-site maintenance contract, parts- including product manufacturer management; labor- including exclusive Toll Free line for 2-Hour call back time and unlimited 2- Day On Site Emergency Service (Business hours, MonFri) and 1 scheduled preventative maintenance.	\$6,460.91	\$6,460.91
				SubTotal		\$6,460.91
				Ft. Walton 7-703		
53	1	D&M	DBT-3313UDCIP	Universal Blu-ray DVD/CD Player with RS232, BD Reg. A, DVD Reg. 1	\$843.37	\$843.37
54	1	NEC PSP GOVT/EDUCAT	ION**NP-PA672W-13ZL	NP-PA672W with NP13ZL lens. Bundle includes PA672W projector and NP13ZL lens.	\$2,866.45	\$2,866.45
55	1	Dalite	TBD	CONTOUR ELECTROL WALL MOUNTED ELECTRIC SCREEN	\$1,195.00	\$1,195.00
56	1	Tech Ops	OFE	Owner-furnished equipment - Two Displays (Optional)	\$0.00	\$0.00
57	2	Chief Manufacturing	LTMU	LARGE, HEIGHT ADJUSTABLE, TILT MOUNT	\$204.65	\$409.30
58	1	Smart Education	SP518-NB	SMART Podium 518 interactive pen display with SMART Notebook software used FOR ANNOTATION AND PREVIEW ONF ANY SELECTED SOURCE	\$2,029.00	\$2,029.00
59	1	Smart Education	SDC-450	SMART Document Camera 450	\$799.00	\$799.00
60	2	Extron			\$286.59	\$573.18



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
			60-1271-13	HDMI Twisted Pair Receiver - 230 feet (70 m)		
61	2	Extron	60-1271-12	HDMI Twisted Pair Transmitter - 230 feet (70 m)	\$286.59	\$573.18
62	1	Crestron	DMPS3-300-C	3-Series® DigitalMedia™ Presentation System 300	\$4,772.73	\$4,772.73
63	2	Crestron	DM-RMC-SCALER-C	DigitalMedia 8G+™ Receiver & Room Controller w/Scaler	\$823.53	\$1,647.06
64	2	Crestron	DM-TX-201-C	DigitalMedia 8G+™ Transmitter 201	\$764.71	\$1,529.42
65	2	Crestron	HD-SCALER	High-Definition Video Scaler	\$588.24	\$1,176.48
66	2	Extron	60-1271-13	HDMI Twisted Pair Receiver - 230 feet (70 m)	\$286.59	\$573.18
67	1	Extron	60-1437-01	HDMI to Four Output DTP Twisted Pair Distribution Amplifier - 230 feet (70 m)	\$1,701.22	\$1,701.22
68	2	Extron	60-1271-13	HDMI Twisted Pair Receiver - 230 feet (70 m)	\$286.59	\$573.18
69	2	Extron	60-1271-12	HDMI Twisted Pair Transmitter - 230 feet (70 m)	\$286.59	\$573.18
70	1	Tech Ops	OFE	Owner-furnished equipment - Two Bose 70V Speakers (Optional)	\$0.00	\$0.00
				VTC		
71	1	Cisco	CTS-SX80-IP60-K9	IntPkg SX80 - Camera and touch 10	\$12,450.00	\$12,450.00
72	1	Cisco	CTS-CAM-P60=	Cisco Telepresence Precision 6	\$4,450.00	\$4,450.00
73	1	Cisco	PSU-12VDC-40W=	Power Supply	\$0.00	\$0.00
74	1	Cisco	PWR-CORD-US-A=	Pwr Cord US 1.8m Black YP-12 To YC-12	\$0.00	\$0.00
75	1	Tech Ops	OFE	Owner-furnished equipment - Audio Science Ceiling Microphone (Optional)	\$0.00	\$0.00
76	2	Cisco			\$127.50	\$255.00



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
			CTS-CAM60-BRKT	Bracket for mounting of Precision 60 Camera		
77	1	Tech Ops (ZZZZZZ)	*SVC-HD	Remote Help Desk Services, Toll Free Help Desk Support, Manufacturer RMA Facilitation	\$2,601.43	\$2,601.43
				Control		
78	1	Crestron	TPMC-9-B-T	9" Tilt Touch Screen, Black Textured; includes TPS-6X-IMCW & PW-2407WU	\$2,235.29	\$2,235.29
79	1	Netgear	GS108P-100NAS	NETGEAR ProSafe GS108P 8-port 10/100/1000 Gigabit Switch with 4-port PoE - Switch - 8 x 10/100/1000 - desktop - PoE	\$219.28	\$219.28
				Hardware		
80	1	Tech Ops	OFE	Owner-furnished equipment - Lectern (Optional)	\$0.00	\$0.00
81	1	Middle Atlantic Products	Rack	Equipment Rack - ~25 Space	\$731.00	\$731.00
82	2	Middle Atlantic	UTR1	HALF/THIRD RACK UNIVERSAL SHELF	\$23.51	\$47.02
83	1	Extron	60-1471-13	Twisted Pair Extender for USB Peripherals	\$420.73	\$420.73
84	1	Extron	60-1471-12	Twisted Pair Extender for USB Peripherals	\$420.73	\$420.73
85	1	Cables to Go	40367	Velocityandtrade; DVI-Dandtrade; Male to HDMI(R) Female Inline Adapter	\$9.66	\$9.66
86	2	Crestron	CBL-HD-DVI-12	Crestron® Certified HDMI® to DVI Interface Cable, 12 ft	\$37.06	\$74.12
87	3	Crestron	CBL-HD-DVI-6	Crestron® Certified HDMI® to DVI Interface Cable, 6 ft	\$26.47	\$79.41
88	7	Crestron	CBL-HD-3	Crestron® Certified HDMI® Interface Cable, 3 ft	\$21.18	\$148.26
89	5	Crestron	CBL-HD-6	Crestron® Certified HDMI® Interface Cable, 6 ft	\$26.47	\$132.35



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
90	1	Crestron	CBL-HD-12	Crestron® Certified HDMI® Interface Cable, 12 ft	\$41.18	\$41.18
91	1	Crestron	CBL-VGA-AUD-12	Crestron® Certified Computer VGA Interface Cable w/Audio, 12 ft	\$31.76	\$31.76
92	2	Crestron	CBL-DVI-6	Crestron® Certified DVI-D Interface Cable, 6 ft	\$24.35	\$48.70
93	3	Milestone	PACPC1	POWER CONDITIONER ACCESSORY	\$113.31	\$339.93
94	1	APC	AP7900	APC Rack PDU, Switched, 1U, 15A 100/120V	\$477.71	\$477.71
95	1	APC	LE1200	APC Line-R 1200VA Automatic Voltage Regulator	\$51.81	\$51.81
				Ft. Walton 7-703 Services		
96	32	Tech Ops	ENGINEERING	Includes system design, testing/setting of system, etc.	\$100.00	\$3,200.00
97	30	Tech Ops	PROGRAMMING	Includes all programming of the control system to provide a finished product of controlling your A/V System.	\$100.00	\$3,000.00
98	12	Tech Ops	PROJECT MANAGEMENT	Includes all required construction and installation coordination.	\$85.00	\$1,020.00
99	16	Tech Ops	PRE-INSTALL	Includes all fabrication, modification, assembly, rack wiring, etc. prior to on-site installation.	\$65.00	\$1,040.00
100	112	Tech Ops	INSTALLATION	Includes all on-site installation, wiring, coordination, supervision, testing, and system check-out.	\$65.00	\$7,280.00
101	1	Tech Ops	TRAINING	System operational training for normal usage and trouble-shooting including basic operator's "one page cheat sheet", and equipment cd's.	\$85.00	\$85.00
102	1	Tech Ops	HARDWARE	Includes cabling, connectors, labeling, unistrut, vented plates, terminal strips, lacing bars, etc.	\$2,800.00	\$2,800.00
103	1	Tech Ops	G&A	Includes all applicable Freight, Insurance, Permits, and Licenses as may be required by law.	\$1,849.99	\$1,849.99



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
				SubTotal		\$67,375.29
				OPTIONAL		
104	1	Tech Ops	*SVC-SLV	One-Year on-site maintenance contract, parts- including product manufacturer management; labor- including exclusive Toll Free line for 2-Hour call back time and unlimited 2- Day On Site Emergency Service (Business hours, MonFri) and 1 scheduled preventative maintenance.	\$6,460.91	\$6,460.91
				SubTotal		\$6,460.91
				PENSACOLA BLDG 4 Room 305		
105	1	Tech Ops	OFE	Owner-furnished equipment DISPLAYS ALREADY MOUNTED (Optional)	\$0.00	\$0.00
106	1	Tech Ops	OFE	Owner-furnished equipment SPEAKERS (Optional)	\$0.00	\$0.00
107	1	Tech Ops	OFE	Owner-furnished equipment DISPLAYS (Optional)	\$0.00	\$0.00
108	1	Tech Ops	OFE	Owner-furnished equipment DISPLAYS (Optional)	\$0.00	\$0.00
109	1	D&M	DBT-3313UDCIP	Universal Blu-ray DVD/CD Player with RS232, BD Reg. A, DVD Reg. 1	\$843.37	\$843.37
110	1	NEC PSP GOVT/EDUCATION	DNNP-PA672W-13ZL	NP-PA672W with NP13ZL lens. Bundle includes PA672W projector and NP13ZL lens.	\$2,866.45	\$2,866.45
111	1	Dalite	**TBD	Fixed Frame Projection Screen Size TBD	\$2,000.00	\$2,000.00
112	1	Smart Education	SP518-NB	SMART Podium 518 interactive pen display with SMART Notebook software used FOR ANNOTATION AND PREVIEW ONF ANY SELECTED SOURCE	\$2,029.00	\$2,029.00
113	1	Smart Education	SDC-450	SMART Document Camera 450	\$799.00	\$799.00



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
114	1	Crestron	DM-MD8X8-RPS	8x8 DigitalMedia™ Switcher w/Redundant Power Supply	\$3,235.29	\$3,235.29
115	5	Crestron	DMC-C	DigitalMedia 8G+™ Input Card for DM® Switchers	\$647.06	\$3,235.30
116	2	Crestron	DMC-4K-HD	4K HDMI® Input Card for DM® Switchers	\$588.24	\$1,176.48
117	2	Crestron	DMC-4K-CO-HD	2-Channel 4K DigitalMedia 8G+™ Output Card for DM® Switchers	\$941.18	\$1,882.36
118	1	Crestron	DMC-HDO	2-Channel HDMI® Output Card for DM® Switchers	\$411.76	\$411.76
119	4	Crestron	DM-RMC-SCALER-C	DigitalMedia 8G+™ Receiver & Room Controller w/Scaler	\$823.53	\$3,294.12
120	4	Crestron	DM-TX-201-C	DigitalMedia 8G+™ Transmitter 201	\$764.71	\$3,058.84
121	1	Crestron	DM-TX-401-C	DigitalMedia 8G+™ Transmitter 401, includes PW-2407WU	\$1,176.47	\$1,176.47
122	1	Crestron	HD-SCALER	High-Definition Video Scaler	\$588.24	\$588.24
123	3	Extron	60-1271-13	HDMI Twisted Pair Receiver - 230 feet (70 m)	\$286.59	\$859.77
124	3	Extron	60-1271-12	HDMI Twisted Pair Transmitter - 230 feet (70 m)	\$286.59	\$859.77
				VTC		
125	1	Cisco	CTS-SX80-IP60-K9	IntPkg SX80 - Camera and touch 10	\$12,450.00	\$12,450.00
126	1	Cisco	CON-PSRN-CTSSX860	PRTNR TP VID 8X5XNBD Cisco SX80 Codec,Prec 60 Cam T10	\$0.00	\$0.00
127	2	Cisco	CTS-CAM-P60=	Cisco Telepresence Precision 6	\$4,450.00	\$8,900.00
128	2	Cisco	CON-PSRN-CTSCAM60	PRTNR TP VID 8X5XNBD Cisco TelePresence Precision 60 Camera	\$0.00	\$0.00
129	2	Cisco	PSU-12VDC-40W=	Power Supply	\$0.00	\$0.00



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
130	2	Cisco	PWR-CORD-US-A=	Pwr Cord US 1.8m Black YP-12 To YC-12	\$0.00	\$0.00
131	3	Cisco	CTS-CAM60-BRKT	Bracket for mounting of Precision 60 Camera	\$128.13	\$384.39
132	1	Tech Ops (ZZZZZZ)	*SVC-HD	Remote Help Desk Services, Toll Free Help Desk Support, Manufacturer RMA Facilitation	\$3,098.36	\$3,098.36
				Control		
133	1	Crestron	CP3N	3-Series Control System®	\$1,529.41	\$1,529.41
134	1	Crestron	TPMC-9-B-T	9" Tilt Touch Screen, Black Textured; includes TPS-6X-IMCW & PW-2407WU	\$2,235.29	\$2,235.29
135	1	Netgear	GS108P-100NAS	NETGEAR ProSafe GS108P 8-port 10/100/1000 Gigabit Switch with 4-port PoE - Switch - 8 x 10/100/1000 - desktop - PoE	\$219.28	\$219.28
				Hardware		
136	1	Middle Atlantic Products	WRK-RR44	ADD.44SP RAIL KIT	\$87.20	\$87.20
137	1	Middle Atlantic Products	PDT-1415C	14 OUTLETS,15A,CORD,SURGE	\$123.16	\$123.16
138	1	Middle Atlantic Products	VBK-W27-W32	27/32 DP WRK VENT BLOCK K	\$11.30	\$11.30
139	1	Middle Atlantic Products	MW-10FT-FC	10"(1)FAN/TOP W/FC M/W	\$384.90	\$384.90
140	1	Middle Atlantic Products	SPN-44-312	PR BLK 44SP SDS FOR 31-32	\$463.82	\$463.82
141	1	Middle Atlantic Products	WRK-44-32	44SP/32D MULTIBAY WRK	\$871.22	\$871.22
142	1	Extron	60-1471-13	Twisted Pair Extender for USB Peripherals	\$420.73	\$420.73
143	1	Extron	60-1471-12	Twisted Pair Extender for USB Peripherals	\$420.73	\$420.73



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
144	1	Cables to Go	40367	Velocityandtrade; DVI-Dandtrade; Male to HDMI(R) Female Inline Adapter	\$9.66	\$9.66
145	2	Crestron	CBL-HD-DVI-12	Crestron® Certified HDMI® to DVI Interface Cable, 12 ft	\$37.06	\$74.12
146	3	Crestron	CBL-HD-DVI-6	Crestron® Certified HDMI® to DVI Interface Cable, 6 ft	\$26.47	\$79.41
147	7	Crestron	CBL-HD-3	Crestron® Certified HDMI® Interface Cable, 3 ft	\$21.18	\$148.26
148	5	Crestron	CBL-HD-6	Crestron® Certified HDMI® Interface Cable, 6 ft	\$26.47	\$132.35
149	2	Crestron	CBL-HD-12	Crestron® Certified HDMI® Interface Cable, 12 ft	\$41.18	\$82.36
150	2	Crestron	CBL-VGA-AUD-12	Crestron® Certified Computer VGA Interface Cable w/Audio, 12 ft	\$31.76	\$63.52
151	2	Crestron	CBL-DVI-6	Crestron® Certified DVI-D Interface Cable, 6 ft	\$24.35	\$48.70
152	3	Milestone	PACPC1	POWER CONDITIONER ACCESSORY	\$113.31	\$339.93
153	1	APC	AP7900	APC Rack PDU, Switched, 1U, 15A 100/120V	\$477.71	\$477.71
154	1	APC	LE1200	APC Line-R 1200VA Automatic Voltage Regulator	\$51.81	\$51.81
				PENSACOLA BLDG 4 Room 305 Services		
155	32	Tech Ops	ENGINEERING	Includes system design, testing/setting of system, etc.	\$100.00	\$3,200.00
156	32	Tech Ops	PROGRAMMING	Includes all programming of the control system to provide a finished product of controlling your A/V System.	\$100.00	\$3,200.00
157	20	Tech Ops	PROJECT MANAGEMENT	Includes all required construction and installation coordination.	\$85.00	\$1,700.00
158	20	Tech Ops	PRE-INSTALL	Includes all fabrication, modification, assembly, rack wiring, etc. prior to on-site installation.	\$65.00	\$1,300.00



#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
159	160	Tech Ops	INSTALLATION	Includes all on-site installation, wiring, coordination, supervision, testing, and system check-out.	\$65.00	\$10,400.00
160	1	Tech Ops	TRAINING	System operational training for normal usage and trouble-shooting including basic operator's "one page cheat sheet", and equipment cd's.	\$85.00	\$85.00
161	1	Tech Ops	HARDWARE	Includes cabling, connectors, labeling, unistrut, vented plates, terminal strips, lacing bars, etc.	\$3,250.00	\$3,250.00
162	1	Tech Ops	G&A	Includes all applicable Freight, Insurance, Permits, and Licenses as may be required by law.	\$2,500.00	\$2,500.00
				SubTotal		\$87,058.84
163	1	Tech Ops	*SVC-SLV	One-Year on-site maintenance contract, parts- including product manufacturer management; labor- including exclusive Toll Free line for 2-Hour call back time and unlimited 2- Day On Site Emergency Service (Business hours, MonFri) and 1 scheduled preventative maintenance.	\$7,813.15	\$7,813.15

Sales Tax	\$0.00
CubTotal	\$242,591.60
	SubTotal Sales Tax

