

STUDENT TECH FEE PROJECT 2009 PROJECT SUMMARY SHEET

Project Title: Parks Hall 108 Behavior Research Lab Project # _____
(STF staff will enter)

Department /Organization College of Business and Economics

Applicant Name/s: Dean Brian Burton Mail Stop: 9072 Phone: x3896

Dr. Steve Ross Mail Stop: 9077 Phone: x4890

Mr. David Auer Mail Stop: 9072 Phone: x2904

Amount Requested for Project:\$ 42,276.98

Contribution from Applicant's Department/Unit (if applicable):\$

Date of Submission: November 26, 2008

APPROVAL SIGNATURES:

Department Chair

College Dean

Space Administration

Vice Provost for Information Technology

AS President

Provost

Authorization for Contribution Resources: _____

Project's Strategic Priority by College: 2

2009 Student Technology Fee Proposal Form

Title of Project: Parks Hall 108 Behavior Research Lab

Department/Organization: **CBE**

Name(s) of Project Applicant(s)

Name **Dean Brian Burton MS 9072**

Phone **x3896**

Name **Dr. Steve Ross MS 9077**

Phone **x4890**

Name **Mr. David Auer MS 9072**

Phone **x2904**

Principal Contact person:

Name **Mr. David Auer**

Phone **x2904**

Amount Requested for project: **\$42,276.98**

Contribution by Requesting Organization:

Important note: Before completing this form, please read the Proposal Form Instructions located on the STF website:

<http://www.wvu.edu/stf/>

I. Project Abstract

Give an overview of existing environment, and summarize the items being requested. Include a brief explanation as to how the requested technology will improve student access to technological resources and/or enhance the *quality* of the student academic experiences through the use of technology and/or increase the *integration* of technology into the curriculum.

The modern Business Administration, Accounting, and Economics curriculum makes extensive use of technology for both delivery of instruction as well as an object of the instruction. The computer laboratory, which was once the domain of Computer Science and Management Information Systems (MIS) faculty, has been invaded by all disciplines as instructors endeavor to prepare their students for the challenges of the 21st Century. Students majoring in Economics, for instance, must learn how to search public government databases, for the U.S. and other countries, as well as use those data in arguing for a particular monetary policy. Students of Manufacturing and Operations Management must learn how to use software as a critical aid for tasks ranging from facility design to production planning; for these students, using professional-quality software enables them to work with larger, more realistic problems once they have mastered the basic principles.

Technology is not the only pervasive feature of the modern business world. Virtually every significant project requires the efforts of multiple persons. Many business classes include group projects in an effort to prepare our students to function as effective team leaders and members. MIS students work in teams to analyze and design information systems. Management students work in teams to determine proper responses to union/management situations. Teams of Marketing students plan, conduct, and analyze consumer research projects. Instructors coach the teams in both teamwork (process) as well as the qualities of a good product. Teams often meet both during class hours and outside of class.

More and more, these teams are dependent on the use of technology to prepare their work.

Neither the modern classroom nor the traditional computer laboratory provide an ideal venue for these types of instruction. Classrooms with projection technology allow the instructor to demonstrate technology but do not afford students the opportunity to immediately practice the technique, nor to interact, via technology, with either the instructor or with each other. Instructors need a facility that allows the students to participate collaboratively, on a real-time basis, with computers, the local network, and the worldwide web. Computer laboratories, on the other hand, are typically designed as individual workstations with limited support for instruction with learning teams. The design of the stations is optimized for one-person/one-computer situations and the use of the lab by student groups results in congestion around work stations as well as unused resources. This is especially true of Parks Hall 210, the primary computer laboratory for the College of Business and Economics.

The purpose of this project is to enable use and instruction of information technology in settings other than computer laboratories and provide a facility more amenable to instruction about group process. This project will create a technology-mediated Behavior Research Lab (BRL) and classroom facility in the College of Business and Economics in the Parks Hall 108 room complex.

The College of Business and Economics is developing the Parks Hall 108 Behavior Research Lab (which consists of the PH 108 classroom, five associated breakout/observation rooms, and the PH 106 South control room) into a team computing and interactive multimedia facility to enhance role-playing and team exercises in business classes.

Uses include (1) audio and video recording, playback and assessment of student role-playing assignments; (2) live phone-conferencing and video-conferencing; (3) live email exchange; (4) team-computing (for example, during computer simulation exercises); and (4) other related uses.

Although Parks Hall 108 is not a General University Classroom (GUC) (it is scheduled by the College of Business and Economics), a large number of students from many CBE concentrations use the classroom. CBE has already been able to obtain some resources to help create the facility, however the facility still requires improvement to fully satisfy the educational needs of students.

This project will:

- (1) Acquire and install network equipment to create the basic BRL LAN to support all activities on all (up to 14) computers currently in the PH 108 complex. While the computers in the BRL will also still be connected to and access the WWU LAN, the BRL LAN will be an isolated LAN such that network traffic on the BRL LAN will not be seen on the WWU LAN.
- (2) Acquire and install audio-video observation/monitoring equipment for both halves of PH 108 and the five breakout rooms.
- (3) Acquire audio, video and business communication computer hardware and software for use in the PH 106 South Control Room. This equipment will allow real-time monitoring and recording from systems installed in the PH 108 complex.

The total cost of the project is \$ 42,276.98.

II. Relationship to STF Objectives and Impact upon existing Academic Programs

Describe your proposed project in detail. Tell us how it will provide positive benefits to specific courses or instructional programs.

1. From a **student perspective**:
 - a. How would this project provide additional student access to technological resources?
The equipment in the PH 108 Behavior Research Lab is used to directly support curriculum by providing in class technology access for class instruction and individual/team work on class assignments. This project will broaden and enhance the quality of the student's experience by giving them access to current business technology, together with current business software for student use and familiarization. This project will provide hardware and software necessary for satisfactory operation of the PH 108 Behavior Research Lab.
 - b. How would this project broaden or enhance the quality of the student's academic experience through the proposed technology?
Up-to-date, efficient technology contributes to efficient use of technological resources by allowing students to accomplish the same work more efficiently. This translates into a higher quality experience for students. It also means less time per student on the equipment, which allows greater numbers of students to use the equipment.
 - c. How would this project integrate technology into coursework?
This project will give instructors the tools needed to integrate such technology as video-conferencing, phone-conferencing, email exchange and similar methodology into coursework. Up-to-date, efficient computer hardware and software allows the integration of work with the Internet, multimedia CD-ROM supplements, and data files from software such as Microsoft Power Point, Microsoft Visio, Microsoft Project, Microsoft SQL Server, and various web servers.
2. From a **faculty perspective**, explain how this project will enhance your ability to help students meet their educational goals.
CBE classes use course specific technology and software that is supported in PH 108 for class use, such as video conference and simulation software intended for team use. Such technology and software is installed, maintained and used in direct support of the educational goals of students taking CBE courses. The performance of PH 108 thus directly affects the educational experience of students taking CBE courses.

3. Will other departments be involved with this project? If so, please describe.

No

4. Has any part of this project previously been funded by STF?

No Yes (Please describe): **The only STF funds were for the initial installation of PH 108 computer workstations, which were funded by an STF 2002 grant.**

CBE has funded or co-funded (with non-STF funding) some other improvements in the PH 108 Behavior Research Lab, including an upgrade of the computer workstations in 2007.

III. Utilization

1. Please list the anticipated number of times and duration per each use, per quarter, that the proposed technology will be used by students.

This equipment may be used whenever classes being taught in PH 108. Of these classes, however, generally only the MGMT and MBA classes marked with an asterisk (*) in the lists below would use the BRL equipment. None the less, other non-MGMT classes such as MIS classes would have potential uses for the equipment

Thus, the best estimate of use is the classes that may use the classroom together with the number of hours the class will use the classroom during the quarter (class enrollments are shown for reference). The following classes use the room one or more quarters per year. The room is heavily scheduled for use each quarter.

Course Using PH 108	ApproxTotal Qtrly Enrollment (each section)	Total Number of Classroom Hours
ACCT 343	25	40
ACCT 451	25	40
MIS 313	10	10
MIS 323	15	10
OPS 461	35	40
OPS 465	30	40
MGMT 197	15	20
MGMT 313 (*)	35	40
MGMT 322 (*)	35	40
MGMT 401 (*)	25	40
MGMT 413 (*)	25	40
MGMT 423 (*)	15	40
MGMT 424 (*)	20	40
MGMT 427	38	40
MGMT 482	38	40
MBA 508	20	40
MBA 523	10	40
MBA 524	50	40
MBA 529	25	40
MBA 574	50	40
MBA 575	25	40

The following MGMT and MBA classes currently do not use the room, but could be scheduled into it and would use the equipment.

Course Using PH 108	ApproxTotal Qtrly Enrollment (each section)	Total Number of Classroom Hours
MGMT 414 (*)	25	40
MGMT 425 (*)	25	40
MGMT 474 (*)	25	40
MGMT 481 (*)	25	40
MBA 507 (*)	20	40

IV. Project Budget

This section of the proposal details the estimated cost of the project. Please include costs that will be covered by your department or another source, for ongoing costs such as personnel or operating expenses.

To assist you in preparing your budget, please consult with relevant campus support departments (ATUS, Purchasing, Space Administration, etc.) For more information, see this page on our website: <http://www.wvu.edu/stf/instructions.shtml>

ATUS has developed standard configurations for desktop and laptop PCs and Macs. Your project is not limited by these standards, but these figures may be helpful. Standard configurations can be found on the Student Technology Fee website: <http://www.wvu.edu/stf/instructions.shtml>

Please complete all of the following sections (attach Excel spreadsheet for any additional details).

Item	Quantity	Item Cost	Total
PLEASE SEE ATTACHED SPREADSHEET			

We recognize your proposed budget as an estimate. Final funding for successful projects will be established after through technical review; some costs may need adjusting due to price changes. The STF Committee may impose special conditions may upon a project. See Sections B.7 & B.9 of the STF Mission Statement <http://www.wvu.edu/cms/WWU.STF/mission.html>

1. What funding is available from your department or other sources?
2. Could this project be divided into discrete elements that could be funded separately?
 No Yes Please summarize and prioritize project segments with cost estimate for each segment.
3. Are lab fees charged for any of the courses that will use this equipment?
 No Yes If yes, please note: the total funding requested from the STF must reflect the amount collected from course fees for equipment replacement and/or equipment acquisition. All proposals asking for course fees will be reviewed by the Academic Budget Office.

V. Impact on Existing Resources

The proposal should address your project's potential impact on existing resources. Special attention should be given to impact on data transmission networks (e.g. sources accessed, networking equipment, etc.), and personnel (e.g. staffing, administrative support, faculty support, etc.).

Any proposal that includes the replacement of computers should specifically address the feasibility and cost effectiveness of upgrading the computers rather than replacing the computers.

1. Describe how existing equipment is used. Contrast this to projected use if your project was funded.

Not Applicable

2. Is similar equipment or technology available elsewhere on campus—such as the Student Technology Center, Classroom Services, Video Services, Western Libraries, a college lab? If so, please describe why the existing equipment doesn't meet the needs outlined in this proposal.

This equipment may be similar to equipment in other WWU facilities. The equipment in other WWU facilities cannot be used because:

(1) CBE software needs to be available in PH 108 for instructional purposes

(2) Some CBE software is licensed only for use in CBE, and may be installed in CBE PH 108 (for example, Microsoft MSDNAA software).

(3) This facility is uniquely suited to group instruction, including private breakout rooms that are not available in most classroom settings.

3. If this project involves the replacement of equipment:

- a. Describe the 'before and after' configuration changes. A spreadsheet reflecting these changes can be attached.

This project will add technology, not replace it with the exception of the rerouting of some cabling from the former Control Room (PH 106N) to the new Control Room (PH 106S).

- b. Describe the costs and benefits of replacing vs. upgrading (if applicable).

Not Applicable

4. Will this equipment be available to students outside your department?

No Yes

5. If the proposed technology will be used by students outside your department, please describe how they would gain access, how the availability of the equipment will be publicized, the hours/week when the equipment will be available, and any costs that would apply.

Non-CBE students take classes in PH 108

6. Does this project involve the check-out of equipment to students?

No Yes If yes, please discuss whether or not the Student Technology Center could be assigned this task.

6. Does the department have adequate operating funds to provide on-going maintenance and support?

No Yes Please describe.

7. Does the department have adequate personnel funds to provide on-going staff support for this project?

No Yes Please describe,

VI. Space and Site Information

This section addresses any space alteration or site preparation necessary for the proposed project. Site alterations include painting, holes in walls, security systems, carpeting, construction, lighting changes, or conversion of a lab or office

Special Note: If this project requires any site preparation, or if this project uses any space not currently under control of the department, a draft proposal must be submitted to Space Administration by **Friday, November 14, 2008**. Space Administration and Facilities Management will conduct a site survey and respond back to you with information concerning project feasibility, cost, and schedule. This information must be included in the final project proposal.

Proposals for projects that involve any site preparation will be considered only after the required site survey by Space Administration and Facilities Management has been completed.

1. Location for installation of equipment or technology.

PH 108 Behavioral Research Lab suite (7 rooms)

2. Is site modification required?

No Yes Please describe. (Electrical, air, painting, lighting, security, network access, etc.)

Reroute existing microphone cables, install any new required cabling, etc.

3. Will this project use space not currently assigned to your department or area?

No Yes Please describe.

VII. Project Schedule

This section describes your overall implementation schedule. Project awards will be announced by the end of spring quarter. It is anticipated that projects would be substantially completed by the end of the calendar year. If there is any site preparation involved, please align your project schedule with the schedule provided by Space Administration and Facilities Management.

**August-September 2008 Installation in PH 108 during summer break.
Completed by 1st day of classes Fall quarter 2008**

VIII. Constraints

This section should list any external or internal factors that could affect your project schedule, project objectives, or the project budget (e.g. if external approval is required for curricular changes, or if funding must be received by a certain date).

1. Please describe any constraints to this project.
Funds must be available by August 1st, 2008 for all payments. Main work must be completed after end of nine-week Summer Session 2008 and before the start of Fall Quarter 2008. If the approved proposal includes security upgrades, this project will require coordination and scheduling with Facilities Management and ATUS.

IX. External Funding

This section must be completed for any **projects over \$100,000**. For project budgets of this scale, the applicant should investigate opportunities for obtaining external funding for all or part of the proposed project.

1. Describe the external organization(s) able to provide funding in support of this project.
Not Applicable
2. Describe the funding cycle for these requests (submission dates, projected award dates).
Not Applicable
3. Indicate the amount of external funding that would be requested.
Not Applicable
4. In cases where joint funding is requested, what will happen if the STF award is made and the external grant is not awarded?
Not Applicable
5. Has a grant proposal already been submitted for all or part of the proposed STF project?
Not Applicable

**COLLEGE OF BUSINESS AND ECONOMICS
WESTERN WASHINGTON UNIVERSITY**

2009 Student Technology Fee Project Proposal - CBE Parks Hall 108 Behavior Research Lab - Teamwork Observation System

PH 108 BRLab Estimated Costs - BRL Video Obseration System REV 2 11/14/08

Item	Model	Manufacturer	Description	Quantity	Est Price	Ext	
	216 FD	Axis	IP Network Video Camera with Audio / power over ethernet [PoE]	8	699.00	5,592.00	
	Standard	WWU	WWU Network Connections	8	100.00	800.00	
	NetDVMS	OnSSI	IP Network Video Recorder Software	1	1,999.00	1,999.00	
	NetDVMS-1C	OnSSI	per camera License	8	269.00	2,152.00	
	Proliant DL380 G5	HP	CBE BRL Network Linux Server [Video Observaton]	1	10,698.00	10,698.00	
	Windows Server 2003R2	Microsoft	Windows Server Operating System [Video Observation] -Standard Version	1	95.00	95.00	
	Windows Server CAL	Microsoft	Client Access Licenses	25	5.00	125.00	
	WS-C2960-24-TT-L	Cisco	24 Port Managed Network Switch [PH 106S]	1	770.53	770.53	
	WS-C3560G-24PS-S	Cisco	Catalyst 3560 24-Ports 10/100/1000 with PoE [Video System] [PH MDF]	1	3,250.00	3,250.00	
	SuperLoasder 3	Quantum	Backup Tape Autoloader	1	3,806.00	3,806.00	
	Smart-UPS XL 3000 VA	APC	UPS	1	1,569.99	1,569.99	

PH 108 BRLab Estimated Costs - BRL Microphone System REV 2 11/14/08

Item	Model	Manufacturer	Description	Quantity	Est Price	Ext	
			NOTE: Only WWU Facilities costs - cable rerouting				
			Equipment Subtotal			\$ 30,857.52	
			Equipment Sales Tax 8.8%			2,715.46	
			Equipment Total				\$ 33,572.98

Additional material and Cost

Computers and monitor	[Already in PH BRL - no additional STF cost]			1	-	-	
ESTIMATED* Physical Plant installation of power, cables, and signal pathways				1	5,000.00	5,000.00	
ESTIMATED* Monitored security system and connection to University Police				1	2,000.00	2,000.00	
ESTIMATED** Misc interconnecting audio and video cable, and connectors				1	1,000.00	1,000.00	
			Additional Cost Subtotal			\$ 8,000.00	
			Additional Cost Sales Tax 8.8%			704.00	
			Additional Cost Total				\$ 8,704.00
			Project Grand Total				\$ 42,276.98

***NOTE:** Facilities no longer provide detailed curent estimates on work needed for STF proposals. After consulting with Francis Halle it was determined that these costs should be estimated based on prior work and estimates done during other STF proposal processes. These numbers should be reasonable approximations of the maximum cost.

****NOTE:** Estimate