

FY 2008 Technology Fee Proposal

Submitting Organization:

Major Unit: *College of Arts and Sciences*

Department: *Department of Physics and Astronomy*

Contact Person: *Charles Windsor*

E-Mail: *cwindsor@gsu.edu*

Telephone: *1-2279*

1. Project Short Title

<i>5-8 Word Project Title</i>

<i>160NSC Computer Lab</i>

2. Total Requested

Fiscal Year 2008

\$ 9,776

3. Executive Summary

Project Description (three or four sentences)
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<i>This lab will be utilized by both graduate and undergraduate students in the department to prepare work that will be submitted for processing on various computer clusters in the University (for example, the 28-node dual-core Biocluster and the new IBM P5 575 cluster, URSA). Preparation of these jobs (using licensed software installed on these workstations) as well as analysis of results of the calculations and report writing will also be undertaken on these workstations. This lab will promote the use of the University super computing and clusters as well as provide access to software specific to the instructional needs of students in theoretical physics and bio-physics. This lab currently consists of 8 computers. These 8 computers were obtained from previous tech fee awards. They are 5 year old Dell Optiplex GX150s and are not adequate for this application. We propose to replace these 8 computers with 8 new workstations.</i>

4. Project Description

Last year we submitted a proposal for 8 new computers for this lab. The computers awarded were surplus tech fee computers. These were 5 year old Dell Optiplex Gx150's (1 Ghz, 20G hard drive). Many of the computers were not working (usually power supply, hard disk, or disk controller failures). The number of network ports in the lab has been expanded to 10. The lab currently consists of 8 of the 5 year old Tech Fee computers which may or may not be functional.

5. Record the review numbers assigned by IS&T and Facilities. Their assessments must be included in Sections 16 and 17.

IS&T: IST08-021

Facilities: 14509-07

6. Relevance to Regents Guidelines

This request is made under Regents Guidelines items 1, 2, and 3

7. Relevance to Strategic Plan(s)

The purpose of this request is not only to provide access for students to the usual computer capabilities required by their selected discipline such as: the standard Microsoft Office Suite, Mathematica, Origin Lab's Origin Pro, compilers, and web access, but also to prepare work that will be submitted for processing on various computer clusters in the University (for example, the 28-node dual-core Biocluster and the new IBM P5 575 cluster, URSA).

8. Impact on Students Served

This lab will be accessible to Physics graduate students 24 hours per day, 7 days per week except when the University is closed. There are currently 40 Physics graduate students. Approximately 12 of these students are involved in either theoretical physics or bio-physics.

9. Justification of Funding Requirements for Fiscal Year 2008

Provide a specific description of the funding requirements for FY 2008 in the Microsoft Excel spreadsheet below. You must use the same terminology as in the Project Description (page 2, #4) to allow each itemized line to be traced back to the items and functionality appearing in the Project Description. Failure to do so will negatively affect consideration of your proposal. Itemize and total the following categories of expense. If necessary, add lines to the table below corresponding to accounting objects of expense.

Please note that any equipment items less than \$4,999 should be categorized as "supplies."

Object of Expense	Itemized Descriptions	Quantity	Per unit price	Extended Total
Supplies (Note: PCs under \$5,000 go here. Also, use standard dollar amounts and replacement thresholds from sections 11/12, or provide explanation in sections 11/12.)	Standard Computers	8	\$1,222.00	\$9,776.00
	Item 2			
	Item 3			
	Item 4			
	Item 5			
	Item 6			
	Item 7			
Equipment	Item 1			\$0.00
	Item 2, etc			
Software (Note: Include Vendor and Product Name.)	Item 1			\$0.00
	Item 2			
	Item 3, etc			
Maintenance or Contractual Services	Item 1			\$0.00
	Item 2, etc			
Board of Regents Guidelines state "In almost no cases should technology fee revenues be used for ... space renovation, or other items or activities that do not have a direct and immediate impact upon students instructional objectives." (See Attachment 1, #8)				
Construction Services (Requires review of Planning & Facilities)	Item 1			\$0.00
	Item 2			
	Item 3, etc			
Network Connections and Infrastructure Costs (Requires review of UCCS)	Item 1			\$0.00
	Item 2			
	Item 3			
	Item 4, etc			
Physical Security (Note: Costs normally should not exceed 2.5% of Total Requested.)	Item 1			\$0.00
	Item 2			
	Item 3			
	Item 4, etc			
Other Expenses (explain)	Item 1			\$0.00
	Item 2, etc			
Board of Regents Guidelines state "Technology fee revenues may be used - with caution - for new staffing that is either temporary or ongoing." (See Attachment 1, #6)				
Staff Salaries	Item 1			\$0.00
	Item 2, etc			
Fringe Benefits	Item 1			\$0.00
	Item 2, etc			
		Hours/wk	Hourly Rate	
Student Assistant Salaries	Item 1			\$0.00
	Item 2, etc			
Graduate Student Assistant Salaries	Item 1			\$0.00
	Item 2, etc			
TOTAL				\$9,776.00

10. Consequences of Partial Funding

State what the consequences would be on the effectiveness and viability of the proposal if it were only funded in FY 2008 at the following percentages of the requested total:

Only 75% funded: State specifically whether or not the proposed project would remain viable. If the project would remain viable, itemize and total the following categories of expense at 75% funding in the Microsoft Excel spreadsheet below.

Supplies (Note: PCs under \$5,000 go here. Also, use standard dollar amounts and replacement thresholds from sections 11/12, or provide explanation in sections 11/12.)	Standard Computers		6	\$1,222.00	\$7,332.00
	Item 2				
	Item 3				
	Item 4				
	Item 5				
	Item 6				
	Item 7				
Equipment	Item 1				\$0.00
	Item 2, etc				
Software (Note: Include Vendor and Product Name.)	Item 1				\$0.00
	Item 2				
	Item 3, etc				
Maintenance or Contractual Services	Item 1				\$0.00
	Item 2, etc				
Board of Regents Guidelines state "In almost no cases should technology fee revenues be used for ... space renovation, or other items or activities that do not have a direct and immediate impact upon students instructional objectives." (See Attachment 1, #8)					
Construction Services (Requires review of Planning & Facilities)	Item 1				\$0.00
	Item 2				
	Item 3, etc				
Network Connections and Infrastructure Costs (Requires review of UCCS)	Item 1				\$0.00
	Item 2				
	Item 3				
	Item 4, etc				
Physical Security (Note: Costs normally should not exceed 2.5% of Total Requested.)	Item 1				\$0.00
	Item 2				
	Item 3				
	Item 4, etc				
Other Expenses (explain)	Item 1				\$0.00
	Item 2, etc				
Board of Regents Guidelines state "Technology fee revenues may be used - with caution - for new staffing that is either temporary or ongoing." (See Attachment 1, #6)					
Staff Salaries	Item 1				\$0.00
	Item 2, etc				
Fringe Benefits	Item 1				\$0.00
	Item 2, etc				
			Hours/wk	Hourly Rate	
Student Assistant Salaries	Item 1				\$0.00
	Item 2, etc				
Graduate Student Assistant Salaries	Item 1				\$0.00
	Item 2, etc				
TOTAL					\$7,332.00

Only 50% funded: State specifically whether or not the proposed project would remain viable. If the project would remain viable, itemize and total the following categories of expense at 50% funding in the Microsoft Excel spreadsheet below.

Object of Expense	Itemized Descriptions		Quantity	Per unit price	Extended Total
Supplies (Note: PCs under \$5,000 go here. Also, use standard dollar amounts and replacement thresholds from sections 11/12, or provide explanation in sections 11/12.)	Standard Computers		4	\$1,222.00	\$4,888.00
	Item 2				
	Item 3				
	Item 4				
	Item 5				
	Item 6				
	Item 7				
Equipment	Item 1				\$0.00
	Item 2, etc				
Software (Note: Include Vendor and Product Name.)	Item 1				\$0.00
	Item 2				
	Item 3, etc				
Maintenance or Contractual Services	Item 1				\$0.00
	Item 2, etc				
Board of Regents Guidelines state "In almost no cases should technology fee revenues be used for ... space renovation, or other items or activities that do not have a direct and immediate impact upon students instructional objectives." (See Attachment 1, #8)					
Construction Services (Requires review of Planning & Facilities)	Item 1				\$0.00
	Item 2				
	Item 3, etc				
Network Connections and Infrastructure Costs (Requires review of UCCS)	Item 1				\$0.00
	Item 2				
	Item 3				
	Item 4, etc				
Standard Costs normally should not exceed 2.5% of Total Requested.)	Item 1				\$0.00
	Item 2				
	Item 3				
	Item 4, etc				
Other Expenses (explain)	Item 1				\$0.00
	Item 2, etc				
Board of Regents Guidelines state "Technology fee revenues may be used - with caution - for new staffing that is either temporary or ongoing." (See Attachment 1, #6)					
Staff Salaries	Item 1				\$0.00
	Item 2, etc				
Fringe Benefits	Item 1				\$0.00
	Item 2, etc				
			Hours/wk	Hourly Rate	
Student Assistant Salaries	Item 1				\$0.00
	Item 2, etc				
Graduate Student Assistant Salaries	Item 1				\$0.00
	Item 2, etc				
TOTAL					\$4,888.00

11. Standard Dollar Amounts

In constructing the budgetary requests in Sections 9 and 10 above, computer workstations should be budgeted at the following levels:

The following desktop systems are the standard technology for Student Technology Fee purposes. Desktop systems exceeding this capability and price must be specifically justified:

- | | |
|---|---------|
| 1. Windows/Intel processors workstation, including monitor: | \$1,222 |
| 2. Apple Macintosh models: | \$1,376 |

The following types of equipment require justification over and above desktop systems. The following prices and configurations are standard for these types of equipment. Any deviation from these standards must be further justified:

- | | |
|--------------------------------------|---------|
| 1. Windows/Intel processors laptop: | \$1,749 |
| 2. Apple Macintosh laptop: | \$1,382 |
| 3. Personal Digital Assistant (PDA): | \$ 472 |
| 4. Tablet computer: | \$1,984 |

Will purchase suitable Dell OptiPlex computers and monitors as specified in Attachment 2 of this document.

12. Standard Replacement Thresholds

All equipment being requested due to obsolescence or inadequacy of existing equipment must be itemized on the form provided in Attachment 3: Itemization of Equipment to be Replaced. Each item for which replacement funding is being requested will be in one of the following two categories:

8 computers are to be replaced. See Attachment 3: Itemization of Equipment to be Replaced

13. Prerequisite, Non-Technology Fee Funding

N/A

14. Matching Funds

N/A

15. Staffing and Other Support Availability

The Department Technology Coordinator will provide software and hardware maintenance required by this lab. This staff will ensure all new equipment meets security requirements on campus as well as maintain them throughout their life cycle.

16. Space Availability and Impact on Facilities

For CBSAC and Planning & Facilities Use Only:

CBSAC and Planning & Facilities Assessment of Space Availability and Impact on Facilities (this information is also transmitted to techfee@gsu.edu):

This project has no impact on facilities.

17. Impact on Computing/Networking/Information Security Infrastructure

For IS&T Use Only:

IS&T Assessment of Network/Computing/Information Security Infrastructure:

Information Security Review (Tammy Clark):

Impact: Yes

Assessment: Ensure that AV/ISS Proventia desktop software is installed on all computers—contact security@gsu.edu for instructions.

Wireless and Network Ports Review (Mark Roberson):

Impact: Yes, minimal impact expected increased bandwidth utilization expected from higher performing computers.

Assessment: Assumes reuse of all existing network ports... any additional ports should be priced at \$410 per.

Server Connections (Charles Hollingsworth, Tammy Clark, Keith Campbell):

Impact: No, (No-CWH), No impact - KEC

Assessment:

External Connections (Charles Hollingsworth):

Impact: (No-CWH)

Assessment:

DVR Installations (Mark Roberson, Tammy Clark, Charles Hollingsworth):

Impact: No, (No-CWH)

Assessment:

Lab and Classroom Configurations (Joe Amador):

Impact: Yes/No NO

Assessment: IS&T have negotiated bulk pricing packages for Dell Optiplex 745 which should be used for this project if funded.

18. Physical Security Needs

N/A

19. Post-Project Assessment Criteria

Purchase and install the computers Fall Semester – 2007

20. Review and Acknowledgements

Attach electronic notes or documentation showing that the following units or administrators have reviewed or acknowledged this proposal:

- Matching funds commitment from appropriate fiscal officer

GEORGIA STATE UNIVERSITY
Student Technology Fee FY 2008
Itemization of Equipment to be Replaced
Due to Obsolescence or Inadequacy

Unit: Department of Physics and Astronomy

Proposal Submitter: Charles Windsor

Proposal/Award Title: 160NSC Computer Lab

If this proposal includes a request to replace old equipment with newer equipment due to obsolescence or inadequate performance, please itemize the specific machines or software to be replaced.

Station Number	GSU ID	Serial No.	Current Room Location	Make	Model	CPU	Mhz	Manu. Date
1	505278	90w2z01	160nsc	Dell	Optiplex Gx150	Pentium III	1Ghz	Oct-01
2	504873	8n55x01	160nsc	Dell	Optiplex Gx150	Pentium III	1Ghz	Sept-01
3	505197	5hk2z01	160nsc	Dell	Optiplex Gx150	Pentium III	1Ghz	Oct-01
4	505199	Chk2z01	160nsc	Dell	Optiplex Gx150	Pentium III	1Ghz	Oct-01
5	505206	Cjk2z01	160nsc	Dell	Optiplex Gx150	Pentium III	1Ghz	Oct-01
6	505341	Ds82z01	160nsc	Dell	Optiplex Gx150	Pentium III	1Ghz	Oct-01
7	505141	1fv2z01	160nsc	Dell	Optiplex Gx150	Pentium III	1Ghz	Oct-01
8	505128	5bv2z01	160nsc	Dell	Optiplex Gx150	Pentium III	1Ghz	Oct-01