# FY04 Technology Fee Proposal

**Submitting Organization:**
- Major Unit: College of Arts and Sciences
- Department: Mathematics and Statistics

**Contact Person:** Guantao Chen
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- Telephone: 404-651-0681

1. **Project Short Title:**

   Scientific Calculators for Math and Statistics Classes

2. **Total Requested:**

   Fiscal Year 2004
   - $13,762.04

3. **Executive Summary:**

   Project Description (three or four sentences)
   
   Purchasing sets of hand-held graphing calculators for two classrooms in order to make them more accessible for individual student use and class use. These proposed calculators will be mainly used in fundamental mathematics and statistics courses such as Algebra, Precalculus, Statistics, and Calculus. Majority students are required to take these courses. The goal is to enable students in Mathematics and statistics classes to have access portable computing devices to enhance their learning. Additionally, the calculators will be used in all mathematics courses for pre-service and in-service teachers offered through our department.

4. **Record the review numbers assigned by UCCS and Facilities. Their assessments must be included in Sections 15 and 16.**

   **UCCS:** uccs Review number 03-043
   **Facilities:**

5. **Relevance to Regents Guidelines**

   The proposal meets the Regents’ Guidelines, most specifically guideline 1 (Technology fee revenues should be used primarily for the direct benefit of students to assist them in meeting the educational objectives of their academic programs) and 2 (Technology fee revenues should be used to assure that there are sufficient campus licenses for...
primary productivity tools such as those found in the Microsoft Offices product suites and for discipline specific software). Funds from the proposal will not be used for new staff (Guideline 6), development of software packages (Guideline 7), other than allowing implementation of software developed by faculty or encouraging faculty to do so, or administrative software (Guideline 8).

Relevance to Strategic Plan(s)

*Improvement of both undergraduate and graduate instruction in the Natural Science is a priority in the University Strategic Plan. In Mathematics and Statistics Department Strategic Plan, implementation of modern computing technology to enhance instruction is a priority.*

6. Impact on Students Served

The proposed software will be used primarily to enhance the following courses:

**Math 0099. Intermediate Algebra.** A transition from elementary algebra to college algebra.

**Math 1070. Elementary Statistics and Math 1090. Honors Statistics.** Two gateway statistics courses for students major in Business, Natural Sciences, Nursing, and Education.

**Math 1101. Mathematical Modeling.** A math course for students major in either social science or natural science. Emphasis is on the use of elementary functions to investigate and analyze applied problems and questions, on the use of appropriate supporting technology, and on the effective communication of quantitative concepts and results.

**Math 1111. College Algebra.** A gateway math course for most students at GSU

**Math 1220. Survey of Calculus.** A fundamental math courses for students with majors in Business, Social Sciences.

**Math 1113. Precalculus.** A preparation course for students with majors in sciences (including Computer Science, Physics, and Mathematics) and are required taking calculus course.


**Math 4301. College Geometry.** For students major in Education.

7. Justification of Funding Requirements for Fiscal Year 2004
Provide a specific description of the funding requirements for FY2004 in the Microsoft Excel spreadsheet below. 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.”**

<table>
<thead>
<tr>
<th>Object of Expense</th>
<th>Itemized Descriptions</th>
<th>Quantity</th>
<th>Per unit price</th>
<th>Extended Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplies</td>
<td>TI-89 calculator</td>
<td>96</td>
<td>$132.49</td>
<td>$12,719.04</td>
</tr>
<tr>
<td></td>
<td>CBL2-Unit for TI calc</td>
<td>2</td>
<td>$167.50</td>
<td>$335.00</td>
</tr>
<tr>
<td></td>
<td>View System</td>
<td>1</td>
<td>$382.00</td>
<td>$382.00</td>
</tr>
<tr>
<td></td>
<td>Motion Detectors for TI calc</td>
<td>2</td>
<td>$128.00</td>
<td>$256.00</td>
</tr>
<tr>
<td></td>
<td>Microfon for TI calc</td>
<td>2</td>
<td>$35.00</td>
<td>$70.00</td>
</tr>
<tr>
<td>UCCS)</td>
<td>Item 4, etc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Expenses</td>
<td>Item 1</td>
<td></td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>(explain)</td>
<td>Item 2, etc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>$13,762.04</td>
</tr>
</tbody>
</table>

* One Viewing system comes for free with purchase of 96 calculators

8. 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 2004 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.

| Software Maintenance or Contractual Services | TI-89 calculator | 50 | $132.49 | $6,624.50 |
|                                             | CBL2-Unit for TI calc | 1 | $167.50 | $167.50   |
|                                             | View Screen System for TI calc. | 1 | $382.00 | $382.00   |

| Construction Services (Requires review of Planning & Facilities) | Item 1 |          | $0.00 |
| Network Connections and Infrastructure Costs (Requires review of UCCS) | Item 1 |          | $0.00 |
| Other Expenses (explain) | Item 1 |          | $0.00 |
| TOTAL |           |          | $7,174.00 |
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.

The require amount is reasonable small and we cannot do anything under 50% request funding

9. Standard Dollar Amounts

In constructing the budgetary requests in Sections 8 and 9 above, computer workstations should be budgeted at the following levels:

- Windows/Intel processors workstation, including monitor: $1,600
- Apple Macintosh models: $3,000

Requests departing from the above standard amounts require documentation of the specific programmatic need that requires departure from this standard. (See Attachment 2: Standard Windows/Intel instructional workstation.) Please explain any requested departures below:

Provide any justification narrative of programmatic requirements here.

10. 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:

a) If the equipment to be replaced is less than 500 Mhz processor speed, this equipment is considered obsolete due to a university-wide standard. This standard of minimum performance has been set based on requirements for operating the current operating systems and office suites. The proposal submitter must state that the university minimum performance criteria are being used.

b) If the equipment to be replaced exceeds the university minimum of 500 Mhz, the proposal submitter is required to document specific quantitative performance requirements that warrant the replacement of such equipment. The equipment’s inability to perform specific functions must be identified. Also, a statement is required explaining why the performance of such functions is critical to the continued functioning of the facility in which the equipment is located. See Attachment 4: Equipment Exception Replacement Form, which must be completed for all replacement equipment that exceeds the university standard threshold of 500 Mhz.

11. Prerequisite, Non-Technology Fee Funding

Identify any non-technology fee prerequisite funding this proposal is dependent upon. Document that these prerequisite funds are available, should this proposal be funded.

12. Matching Funds

Describe any additional funds that have been committed and will be provided to this project from other sources. These funds should be those that would more effectively leverage the technology fee funding, if approved. Specify whether or not these matching funds are available for a limited time.

In purchasing of 96 calculators (TI-89), we will receive one Viewing Screen System for free. The price of the unit is $382.

13. Staffing and Other Support Availability
If appropriate, describe the specific staff and other continuing fiscal resources required to maintain the proposed project. For staff requirements, identify the current unit and supervisor of staff required to support the related technology. Refer Regents Guideline #6 for guidance on the appropriate use of technology fee funding for new staff requests. However, the FY04 STF Committee, feels, as did the FY03 STF Committee, it is very unwise to rely on technology fees and an annual review by STF subcommittees to maintain staff positions. Accordingly, expect requests for staff funding to be approved with caution and reluctance and with the understanding that these proposals are unlikely to be supported in subsequent years.

14. Space Availability and Impact on Facilities

15. Impact on Computing/Networking/Security Infrastructure

No Impact on University network

16. Post-Project Assessment Criteria

Calculators and supported equipments are purchased and they are either placed in two classrooms or can be carried to classrooms as a package. 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