Proposal Title: TI30XIIIs Calculators for MATH 140

Originator and Position: Dominick Scaletta, Co-Chair, Dept. of Mathematics

Area Dean: Michael Beckham

Campus: MVC

Area Vice President: Dr. Rudolph Besikof

Budget Account Code: Click here to enter text.

*Total Amount Requested: $680

*Please complete all applicable portions of “Section VI - Projected Expense File” now to determine the “Total Amount Requested” above.

Please check:

| One-Time Funding: ☒ | On-Going Funding: ☐ | Safety: ☐ |

1.) For what are you asking? 2.) Why is the request timely and important? 3.) Where was the need identified? Please answer these three questions in 250 words or less. See instructions for further explanation.

We are requesting funding for 40 Texas Instruments TI-30X IIS scientific calculator for use in MATH 140 Introduction to Statistics course as well as 4 Texas Instruments TI-30X IIS Carry Caddy carrying cases to transport them to and from class. It is important to introduce uniformity in the calculators used among the students in order to facilitate both equity and efficiency. The need for these calculators was identified in the classroom, where faculty require that the students have scientific calculators, as they are necessary for a substantial portion of the work, but the students often have old, sub-standard or obscure calculators that lack functionality or reasonable accessibility. The TI 30 X IIS not only does all the necessary calculations for probability and statistics, it does them in a very simple and understandable way. Having a set of these calculators would allow all the students in the course the access to these calculators, and therefore the same opportunity to use this technology in the completion of their coursework.

Section I – Program Review and Learning Outcomes - 20 points possible

1.) Identify support from your 2014-15 Comprehensive Program Review (CPR) or 2015 – 16 Annual Program Assessment (APA) for this request (8 points). Link to Program Review
The CPR section II.D. discusses using tablets or laptops to do data analysis in the course. It is often the case that many of the analyses done by computers or tablets can be done by a calculator. Although the software is important for more complicated calculations and interpretations, much of what is covered in the stats course can be done on a simple calculator. Learning how to use basic technology is also an important step on the path to learning how to use more advanced technology.

2.) How will this request help improve student learning in the course and/or program (12 points)? **Link to Learning Outcomes**

One of the course learning outcomes is “Students will interpret Minitab output as it relates to linear regression with the use of clear and concise language.” Well, all too often the course has been offered in classrooms without computers, and so there is no access to Minitab. Although that is something we might want to change in the future, these calculators actually do many of the calculations found in Minitab, in particular, linear regression. They are portable, easily understood, and achieve a similar goal.

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**Section II – Alignment with Institutional Priorities via the Strategic Plan - 25 points possible**

1.) How is your request aligned to the strategic goals below? Check all (typically 2 – 6 goals total) that apply. Click [here](#) for the 2016-17 Prioritization Allocation Rubric (PAR) for points-weighting during scoring.

**2014-17 Strategic Plan Goals**

| ☐ 1. Reduce time to completion of student educational goals and increase degree, transfer and certificate completion. |
| ☐ 2. Drive institutional decision-making using internal and external data to inform planning and prioritize resources. |
| ☐ 3. Refine staffing plan and process |
| ☐ 4. Improve fiscal responsibility that is sustainable for the long term |
| ☐ 5. Identify sustainability strategies to improve efficiencies in processes district-wide |
| ☒ 6. Expand and improve student involvement in campus life |
| ☒ 7. Promote quality of institution through enhanced communication within the community (internal/external) |
| ☒ 8. Enhance the overall campus life experience |
9. In an effort to serve students build bridges between instructional services, student services and administrative services

10. Increase the College’s visibility, value and recognition in the service area

2.) Please describe the connections between the goals you checked and your proposal (200 words maximum):

6. As we work through problems in class, more students will feel obliged to participate in the calculation of the answer if they are given the same calculator that everyone else has in order for them to participate, this increasing classroom involvement.
7. Allowing the students to all learn how to use the same calculator in doing their coursework will allow stats faculty to communicate more effectively. The class can all be taught how to use one calculator uniformly which can then be referred to throughout the course as a common tool that all the students have to use. His will not only ease communication between the faculty and students, it will also facilitate communication between students as they will all be solving the problems using the same calculator.
8. The students’ life will certainly be enhanced by knowing they’ll have a calculator to use when they go to class, whether or not they can afford one.

Section III – Alignment with Institutional Plans - 15 points possible

Explain how your proposal is supported by the following plans: 2009-16 Educational Master Plan (4 points), Distance Education Plan (4 points), Technology Plan (4 points) and/or Facilities Master Plan (3 points). Link to Plans

This proposal is primarily linked to the technology Plan, as this involves the proliferation of technology in the classroom, and facilitate the uniform introduction of a basic technology which is important to student success at MSJC.

Section IV – Goals and Measurable Outcomes – 30 points possible

1.) Describe your goal(s) for this project (10 points). How will this improve student learning or enhance institutional services? For a review of goals, see pp. 18 – 20 of a presentation via this link.

The primary goal for this project is to create a uniform understanding about how to use a basic scientific calculator in the calculation of statistics and parameters in Math 140. A common problem in this course
arises from students not knowing how to use their own calculator. If one calculator is selected as a tool for the course, this would allow faculty to teach students how to use this one calculator, which will improve the instructor’s ability to teach the computational methods necessary for success in a statistics course.

2.) What are the measurable outcomes for this RAP (10 points)? That is, how will progress toward meeting your goal(s) be identified and/or measured? Click here for learning outcome reference materials.

These goals will be measured through the course CLOs. When the students learning outcomes are tested, there should be a noticeable improvement in the students’ ability to accomplish their coursework.

3.) Explain how your outcomes are tied to your CLOs/PLOs/AUOs/SLOs (10 points).

He outcomes of the goal of this project is precisely improving the CLOs.

Section V – Implementation Plan – 10 points possible

What are the steps that you will take or need to be taken to implement this proposal?

1.) Who is in charge of implementing the project (2 points)? Dominick Scaletta

2.) What are the projected start and end dates (2 points)? Ongoing

3.) What other departments will need to assist to assist with the acquisition/implementation of the project (2 points)?

None

4.) When will the outcomes be measured (2 points)? With the next course CLO examination after the calculators are implemented.

5.) How will you measure the desired outcomes (2 points)? Grading the CLO problems, and looking for improvement.

Section VI - Projected Expense Profile
For the object codes and titles below, please indicate the monetary amounts requested.

Object Code 4XXX
Supplies and Materials: 40 TI30X iis calculators. Amount requested: $600
Supplies and Materials: 4 Carry Caddies. Amount requested: $80
Supplies and Materials: Click here to enter text. Amount requested: Click here to enter text.

Object Code 5XXX
Services: Click here to enter text. Amount requested: Click here to enter text.
Services: Click here to enter text. Amount requested: Click here to enter text.
Services: Click here to enter text. Amount requested: Click here to enter text.

Object Code 6XXX
New Equipment/Building or Site Improvements: Click here to enter text. Amount requested: Click here to enter text.
New Equipment/Building or Site Improvements: Click here to enter text. Amount requested: Click here to enter text.
New Equipment/Building or Site Improvements: Click here to enter text. Amount requested: Click here to enter text.

(S2) Subtotal from Non-Personnel Requests: Click here to enter text.

Total Proposed Budget (sum subtotals (S1) and (S2) above): Click here to enter text.

3. Secondary Effects (if this proposal is approved)

If a Classified/Administrative Personnel Prioritization Request is being submitted in tandem with this RAP, what additional space, if any, is needed to accommodate this position: Click here to enter text.

For equipment and technology requests, will additional space be needed to accommodate the requested equipment? If so, where is the proposed location? Yes, these calculators will remain in the Dept. Chairs office to be checked out by faculty.

Will requested equipment require maintenance agreements or support personnel? If so, what the projected costs? No

Please list future year anticipated needs and estimated financial needs. NOTE: This section refers to any anticipated funding not addressed by this RAP but required in the future. This will not be automatically funded. A new RAP must be completed in the future.
Fiscal Year:  Click here to enter text. Anticipated need:  Click here to enter text. Estimated amount:  Click here to enter text.

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