Technology Request Form
For Annual Planning and Off-Cycle Requests

Submit <u>one</u> form per request. Complete the entire form thoroughly and answer all questions with enough details and be specific. Incomplete or late forms will not be reviewed. For assistance completing this form, please contact your Chair or the Co-Chairs of the Technology Committee. You can also review the Technology Committee's "Prioritization Rubric." If applicable, please reflect on the technology funded by last year's plan, and how it impacted student learning and success and prioritize your requests. For all furniture requests, contact Facilities.

Classroom technology such as entire labs can be submitted as one request. Please be specific and you must provide quotes for each item. For assistance with technology quotes, email the Grossmont College Director of Instructional Technology with your requests. You should also contact District I.T. to inquire about a Statement of Work for your request. If you are submitting a quote for items that are not typically in instructional classrooms please note that you will need to include taxes, shipping and environmental fees.

Please keep in mind when filling out this form that extra consideration is given to proposals that demonstrate one or more of the following:

i.   A critical need for state of the art technology and instructional software

ii. Support of learning outcomes (student, program, institutional, or service)

iii. Assistance to multiple departments

Technology Plan Year

2020- 2021	

*Priority Ranking
(If submitting more than one request in your department)

Title of Request	Location of Request	
Replace and Expand Student Laptops	Biology Department	1

Discipline

Biology

Department

Biology

Contact Person

Bonnie Ripley

Contact Email

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DESCRIPTION

Please provide a brief description of the technology/software or technology project and its core goal(s).

Rationale: Computers and computer software/simulations are a necessary and complementary tool in all fields of Biology. Incorporation of computers in Biology curricula serves to maintain relevancy and teach the skills necessary for students to succeed in their careers.

Core Goals:
 - Incorporate computer simulations for topics that are difficult to introduce and complete within the current curriculum and facilities limitation
- Incorporate Data Analysis using specialized software and Excel to better prepare students for the current job market.

In Fall 2019, Biology submitted a request for 30 laptops to replace all Windows 7 machines and augment Windows 10 machines. This request was approved by the Technology committee and College Council per posted minutes. At this time, no funding has been identified and there is not indication that funding will be available.

PROPOSAL JUSTIFICATION

A. College and District Strategic Plan

Please explain how the technology or enhancement supports the strategic plan. Please include information on how students will be impacted and/or employees or the college or district overall. Would this be a district-wide implementation?

Goal 3 - Retention - A committed, high-standards approach to keeping students in classes and on track for success in achieving their goals at Grossmont College would seem to be the best fit for this request. The incorporation laptops, software and simulations we, we believe, enhance student learning and student success. This, in turn, will increase retention and improve program completion. Today's students may be better engaged in the learning process when familiar technologies are incorporated in the learning process. For example, the natural selection simulation has a game-like interface that allows students to explore the consequences of how predatory crabs can change the characteristics of the snail prey population.

Goal 4 - The ability of the institution to effectively use its human, physical, technology, and financial resources to achieve its mission and to improve academic quality and institutional effectiveness. This activity uses technology to improve the quality of teaching and learning. Biology has and will continue to introduce computing technologies in laboratory and lecture activities. Computers are used in simulation activities (Evolution by Natural Selection, Bio 105, 110, 114, 120. Experimental Design in Bio 120), to introduce Bioinformatics (Bio 230 & Bio 113) and to collect and analyze data (Bio 141L, 144, 145, 215). For Bio 141L activities, data acquisition and simulation equipment (BioPac) was purchased with funds from a prior planning activity. There are too many sections of multiple classes throughout the semester that we are using these applications to make it feasible to reserve a computer lab for our classes.

B. Statewide Initiatives

Does the technology support a state-wide initiative? Please explain.

The computers and software purchases proposed in this activity will support the 2 degree pathways in Biology – AS/ADT, and Preparation for Careers in Allied Health. Introducing students to these applications and skills prepares them for upper level courses and careers where technological skills are critical.

The computers and software purchases support the college Equity Plan and Vision for Success. By providing computers to use in class, we facilitate learning for students who can't afford to have a computer at home that can use the software needed.

B. Mandates

Is the technology mandated by legislation, in support of a legislative mandate or required by accreditation standards? Please explain.

N/A

C. Criticality

What are the consequences and the number of students impacted if the technology/software is not implemented, upgraded or renewed

TracDat contains a history of Biology's nearly decade long plan to introduce and expand the use of computing technologies in lab and lecture classes. Each step of the process included requests for additional and replacement laptops and software. As we enter the current year, Biology has been successful in incorporating a variety of activities that use laptop computers. However, the addition and replacement of the needed technology has not kept pace due to lapses in institutional support. The use of laptops is now so ingrained in the curriculum that the loss would represent a significant impediment to continuation of nearly all our programs. In some cases, the laptops being used are so old they will not run the district standard Windows 10 or Win 10 updated software. Student success is impacted when we don't have enough of the newer computers for the whole class, then some students have to use a different version of software sometimes, which confuses them.

Replacing and augmenting all 3 laptops carts is critical to the continued use of these now essential tools in our lab and some lecture courses. The lack of a 4th laptop cart is preventing the continuation and expansion of the use of computing technologies and negatively impacting enrollment (limiting enrollment due to a lack of laptops)

D. Urgency

Why is this urgent? What is the preferred time for implementation?

With the district and colleges move to Windows 10 along with software vendors requirement for Windows 10 to run the latest version of their software, we are rapidly approaching a critical situation where our ability to serve students will be negatively impacted

E. Supporting Data

How does the data you have support the implementation of the technology? This can be qualitative or quantitative in the form of program review, surveys, observations, SLO or other assessment data, institutional research data or other reports and data.

The technology itself is not being evaluated, but for the integrality of computer-based instruction in our program we have the following references from our Spring 2019 Program Review:

The following sections discuss the history, role, importance and impact of the use of computing technologies in our department

Section 1.1 – History
Section 4.1, 4.3, 4,4 – Facilities & Equipment
Section 5.1, 5.2 – Equity
Section 8.1, 8.3 – Fiscal and Human Resources

Computers are essential to curriculum in Bio 215 & 230, 2 of our 3 Biology majors courses. Bio 215, Biostatistics cannot be taught without computers running the latest version of Excel. At this time, enrollment is limited due to a lack of sufficient laptops. All elements of the Bio 215 curriculum require students to have individual access to laptops. In Bio 230, computer simulation software is essential to teaching the factual and conceptual basis of key topics. It allows student to explore real-world applications of these topics. The rapidly expanding use of informatics can only be taught when students have access to individual laptops.

In Spring 2018, Biology updated its PSLO's to reflect a nationwide effort to modernize undergraduate biology education. A key part of this effort is to educate students in the process of science ("How science is done") and central theory in Biology, Evolution. The use of computer simulations in Experimental Design and Natural Selection permit students to conduct "real-world" experiments that would be impossible in the lab or lecture classroom and also introduces the idea of computational biology to students.

COST ANALYSIS

Please list as much information as you can in sections Funding and Staffing, Resource Factors and Costs. We understand that you may not be able to fully answer all of these questions independently. For instance, some costs will be known and some estimated; please indicated accordingly. Based on the information you provide, District I.T. and/or Instructional Computing Services may conduct a Statement of Work (SOW) analysis and provide input on items such as time to implement, employee hours, number of individuals needed to implement, the needs for a campus and/or district project manager, vendor cooperation, integration with current systems, etc.

Funding and Staffing

Please describe your needs for implementing and maintaining the technology by answering the following questions:

FS1.Will you need College or District staffing support? If so, please explain.

Yes, computers will need to be set up for student use by IT staff.

FS2. Will or could the work be contracted out to a third party? If so, who? Provide contact information and explain.

Yes, but normally it is not.

FS3. Does the company that provides the technology do installation and on-going support? Provide details. How long?

N/A

FS4. Is there categorical funding or outside funding? Be specific.

N/A

Resource Factors

Please provide detail on the following:

RF1. Is this new technology (new to the campus), a renewal, or upgrade of existing technology?

Renewal/upgrade.

RF2. Is the technology compatible with current systems? Please state if you don't know.

Yes.

RF3. What are the estimated maintenance fees, if applicable?

None.

RF4. What are the estimated replacement costs once the technology reaches its end of life cycle?

Cost of laptops at time of purchase.

RF5. Are there any associated on-going support costs? Such as access to vendor support.

No.

RF6. Is this a one-time purchase or annual / recurring fee? Please explain.

One-time

RF7. Are there any other resources or special technology support needed to implement the technology?

No

RF8. What is the estimated time it will take to implement?

Set up of new laptops could take about a week.

RF9. How does this technology impact other campus departments (academic, student services and administrative).

Well, it has turned out that all of our department laptops have been loaned out to people from all over campus during the COVID-19 campus closure. So I would say that they provide a valuable back-up technology strategic reserve for emergencies so that people can work from their homes without needing to buy new computers in order to provide continuity of service.

RF10. How does this technology impact campus facilities.

N/A

RF11. Does the vendor have a VPAT (voluntary product accessibility template) for the technology? Please provide if they do.

N/A

RF12. Vendor contact name and contact information

N/A

Cost

C1. Estimated labor costs (if known):

N/A

C2. Estimated equipment/software costs: Indicate whether known or estimated. Include quotes for all applicable costs. This should include equipment, licenses, taxes, fees, shipping, environmental fees, etc.

We only use software that is installed or already purchased by the department.

C3. Do you have a funding source identified? If yes, please list source and funding alloted:

No

C4. Total estimated or known cost:

Estimate: 30 x $1000 = $30,000

Evaluation

How do you plan to evaluate the technology after implementation? This could include explaining how you will collect qualitative and/or quantitative data showing student usage and impact on learning or student services.

Every semester almost 2000 students use these computers in our courses. We expect that to continue if not increase.

We will be evaluating the learning outcomes associated with computer simulations and programs on the usual cycle for the department. After implementing the new simulation for Experimental Design, instructors noticed that students were achieving the outcomes better (andecdoatally) compared to the old paper-and-pencil activity.

Off-Cycle Requests Only

Has funding been identified for this project? If yes, what is the smart key or funding source (Equity, General Fund, Perkins, etc.)? (This question relates to Section G on the Technology Prioritization Rubric.)

What are the exigent circumstances and/or contributing factors that would qualify this request to be eligible for Off-Cycle consideration? In other words, why can't this request wait until the next annual planning cycle?
(This question relates to Section C on the Technology Prioritization Rubric.)

		3 points	2 points	1 point	Total
A	**Relationship to Strategic Plan**	Technology clearly supports the vision of the Strategic Plan or other college or district plan.	Technology somewhat supports the vision of the Strategic Plan or other college or district plan.	Technology has little or no support for the vision of the Strategic Plan or other college or district plan.	
B	**Support Statewide Initiative** Basic Skills, Student Success, Equity, Strong Workforce, OEI, OER, etc.	The technology clearly supports a state-wide initiative	The technology somewhat supports a state-wide initiative.	The technology has no relation to a state-wide initiative.	
	Mandates	If request is verified as mandated by law or accreditation standard, push through prioritization process as highly recommended.			
C	**Criticality**	The consequences of not supporting this technology are significant. (Such as security concerns, loss of FTES, statewide initiative, etc.)	The consequences of not supporting this technology are moderate.	The consequences of not supporting this technology are relatively minor.	
D	**Urgency**	Time sensitive (less than semester) request to meet security needs, student success, strategic plan, statewide initiative	Moderate time (up to one year) to meet needs.	No timelines or rationale identified for urgent implementation	
E	**Data-informed**	The implementation of the technology is clearly supported by qualitative or quantitative data, e.g. surveys, observations, SLO or other assessment data, institutional research data, or other reports or data.	The implementation of the technology is somewhat supported by qualitative or quantitative data.	The implementation of the technology is not supported by qualitative or quantitative data.	

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