### I. Team Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Member Type</th>
<th>Email</th>
<th>Contact Phone</th>
<th>Responsible for what part</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul da Silva</td>
<td>Primary Team Member</td>
<td><a href="mailto:Paul.daSilva@marin.edu">Paul.daSilva@marin.edu</a></td>
<td>485-9542</td>
<td>Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Becky Brown</td>
<td>Team Member</td>
<td><a href="mailto:Becky.Brown@marin.edu">Becky.Brown@marin.edu</a></td>
<td></td>
<td>chair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jamie Deneris</td>
<td>Team Member</td>
<td></td>
<td></td>
<td>Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aftab Enty</td>
<td>Team Member</td>
<td><a href="mailto:aftab.enty@marin.edu">aftab.enty@marin.edu</a></td>
<td></td>
<td>inventory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Becky Brown</td>
<td>Primary Team Member</td>
<td><a href="mailto:becky.brown@marin.edu">becky.brown@marin.edu</a></td>
<td>7538</td>
<td>equipment, supplies, faculty, TU</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### II. Program Review Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee (Chairs)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris Schultz</td>
<td>Curriculum Committee Chair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blaze Woodlief</td>
<td>Educational Planning Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V-Anne Chernock and Erik Dunmire</td>
<td>Facilities Committee Co-Chairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yolanda Bellisimo</td>
<td>Planning and Resource Allocation Committee Co-Chair/Academic Senate President</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nick Chang</td>
<td>Planning and Resource Allocation Committee Co-Chair/Instructional Equipment Committee Chair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sara McKinnon and Becky Brown</td>
<td>Program Review Committee Chair and SLO Coordinators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chris Schulz</td>
<td>Student Access and Success Committee Chair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael Irvine</td>
<td>Tech Committee Chair</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### III. Vice President of Academic Affairs

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nick Chang</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### IV. Board of Trustees President

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eva Long</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This section will be filled out by faculty and reviewed by the Department Chair, the ARea Dean, the Instructional Equipment Committee, IPC and Budget. Please enter items that will be used over a period of semesters BY STUDENTS... (Note: These should be NEW items that you are requesting one time only - not ongoing or consumable. Ongoing and consumable requests go under "Other Instructional Equipment". Technology-related requests should go under "Technology Requests". Select whether the item is less than or more than $200 each. If you are a large discipline with several areas, please include which area this item is for. Include Tax, Shipping and Handling in the total cost for each item.

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>27 Classes</td>
<td>Over $200 Each</td>
<td>Biology</td>
</tr>
</tbody>
</table>

Description and part number for ordering:

pH Meters

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>$500.00</td>
<td>$0.00</td>
<td>$100.00</td>
<td>$2,100.00</td>
</tr>
</tbody>
</table>

One-time expenses: (e.g. construction, electrical, installation)

No special construction, electrical or installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)

Unit would be maintained and care for by current staff. No additional staffing or upgrades would be needed.

Item to be shared with the following Department/Program: (Include any shared expenses)

Environmental Landscaping and Geology Department.

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)

1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

A This item has been requested 3 times now.

These items would be shared with the Environmental Landscaping program as well as the Geology program. A growing number of courses has forced upon us the need for additional pH meters to keep up with the various number of labs that require them for the proper education of our students. These are small expenditures that have a great deal of impact on the quality of learning in the labs.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

no
3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

Through the use of these meters, students will increase their understanding of foundational scientific principles. This equipment is necessary for students to succeed in not only General Biology, but many other classes that General Biology is a pre-req. for.

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

Approximately 548 students will benefit on an annual basis, and is part of a required lab for General Biology, Human Physiology, Biology 112A, and Biology 112C.

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

Students will demonstrate proficiency in basic scientific equipment, along with the understanding of foundational scientific and biological concepts.

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Outcomes will be measured through lab practicals. Data is currently being gathered.

Additional Justification for this item:

---

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support:</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>48 Classes</td>
<td>Over $200 Each</td>
<td>Biology</td>
</tr>
</tbody>
</table>

Description and part number for ordering:

PROCELL (complete) with power supply.

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
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</table>

One-time expenses: (e.g. construction, electrical, installation)

No special construction, electrical or installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)

There would be no on-going expenses. This unit is required to replace an old power source and gel chamber that is well over 10 years old.

Item to be shared with the following Department/Program: (Include any shared expenses)

Do you have space for this equipment?

Justification for Item (See Rating Rubric)

1. Indicate how important this item is to the life of your discipline.
   • 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   • 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   • 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.
This item is crucial to the life of the discipline. It is equipment that is used repeatedly throughout the semester by the biology majors. Without this equipment the students will be ill prepared for later biology courses in their educational career.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?
The quality would be greatly improved. Currently students play a guessing game as to how long the experiment might last (1.5 hrs - 2.5hrs) due to an old and weak power supply that doesn’t maintain a standard power throughout.

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?
Students would benefit greatly from the addition of new equipment. The equipment currently being used is over 10 years old and does not provide consistent results.

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?
Use of this equipment would prepare students to succeed at 4-year institutions and in industry.

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:
This item is crucial to the Biology 115 course in which the students are asked to do an electrophoresis at least 4 times a semester. That equates to eight labs minimum a year that rely on this piece of equipment to function properly. Many items in the biology program need to be slowly replaced and this is definitely one of those items. It is vital to the education of the students to perform an electrophoresis during their education in the Biology program.
## I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>03</td>
<td>1 Classes</td>
<td>Over $200 Each</td>
<td>Biology</td>
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</table>

### Description and part number for ordering:
Updated Power Lab System (total: $50,950) Updated Powerlab LabChart Systems. These are a vital part of our Physiology labs here at COM (as well as many other institutions). They are also used in student research projects in physiology, as well as in physiology units in our Majors Biology labs. They allow students to experience a variety of physiology and medical concepts first-hand.

### Qty. Unit Cost: Tax: Shipping: Total:

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
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<td>$50,950.00</td>
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</table>

### One-time expenses: (e.g. construction, electrical, installation)
none

### On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)

none

### Item to be shared with the following Department/Program: (Include any shared expenses)
many classes within the L&ES dept. will be able to benefit from this equipment

### Do you have space for this equipment?

### Justification for Item (See Rating Rubric)

1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

A - this equipment has been requested at least three times

The powerlab systems have been a vital part of our physiology lab program for over ten years. Our current systems are starting to fail, and are no longer supported. In addition, we now currently only have four systems, which severely limits our ability to serve students since we must split each lab, with half the students doing an abbreviated lab with the powerlabs and the other half doing another lab in another room, and then swapping.

These new systems will update our systems and dramatically increase our ability to serve the whole classes at once in greater depth, as well as give us the ability to perform labs in muscle physiology and electroencephalography that are currently not possible with our current equipment.
Currently our "powerlab" equipment has been sporadically working, along with one unit permanently out of order. We have contacted the vendor for replacement parts and any updates that could be used with our equipment, but the vendor has stated that because the equipment that we have is so old, there are no replacement parts being manufactured.

Allied Health is one of the very robust and growing segments of our college, and human physiology is a key class in our Allied Health offerings. These powerlabs will insure that our classes remain rigorous, relevant, and maintain a high level of quality instruction, along with benefitting our Biology majors in the new 112 series.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

no
3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?
This equipment allows the student to see in real time actual physiological measurements and responses, similar to the experience in nursing and health care professions. This equipment is essential for the students to understand key physiological concepts. Every college physiology course that is taught with a lab component has some type (there are different vendors) of computerized physiology laboratory device.

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?
This equipment will benefit approximately 225 students per year. The older versions of this equipment is barely usable for the existing students. This newer equipment would benefit the College by attracting new students.

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?
Students are expected to become proficient in using modern physiological equipment, and understanding the fundamental concepts behind the exercises involving this equipment. Also, the requested equipment has many more computer applications to help with student success.

6. How will these outcomes be measured for future planning? What data or evidence supports your request?
outcomes measured in lab practicals, data accumulation in process

Along with the outcomes data being compiled, it is evident from just a professor's observation that when our current "powerlab" doesn't work, the student is very weak on the understanding of the exam questions that involve that equipment and exercise.

Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>24 Classes</td>
<td>Over $200 Each</td>
<td>Biology</td>
</tr>
</tbody>
</table>

Description and part number for ordering:
Leica microscopes for General biology labs

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
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<tbody>
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<td>$5,346.00</td>
<td>$70,146.00</td>
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One-time expenses: (e.g. construction, electrical, installation)
No special construction, electrical or installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
Annual maintenance is necessary to keep instruments functioning at optimal levels.

Item to be shared with the following Department/Program: (Include any shared expenses)
This item is for Biology 110L and introductory biology course taken by many students.
to fulfill their requirement of a biology lab. This item is crucial to all students that attend COM for their general education.

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

A This item has been requested 3 times now. These items would serve 24 sections of General Biology labs with a minimum of 20 students each which equals over 400 students annually. The microscopes currently in use are over 35 years old and many don't even properly function. This is a large but crucial expenditure needed to teach general biology to our students. Without microscopes our students will lack the proper education they expect from the Biology program at College of Marin.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

   Current equipment being used is over 35 years old and cost more in the long run to maintain and service due to old parts that are hard to come by.

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

   This will greatly benefit the students by easing their frustrations and anxieties of a Biology lab. Many of the 440 plus students are using this equipment while taking courses to meet their general education requirements.

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?
I. Instructional Equipment/Materials Requirements

Priority: 05 To Support: 96 Students Category: Over $200 Each Discipline Area: Biology

Description and part number for ordering:
GasPak Jar

<table>
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<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
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<tbody>
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<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
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</table>

One-time expenses: (e.g. construction, electrical, installation)
No special construction, electrical or installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
These items don't require annual maintenance or staffing.

Item to be shared with the following Department/Program: (Include any shared expenses)

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   • 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   • 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   • 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

B

Currently the old GasPak jars are getting brittle and starting to crack, which defeats their purpose. These are used in an array of labs in Microbiology where cultures need to be maintained in an anaerobic environment. The jars are made of a polymer that tends to get brittle and crack over time. This replacement is a necessity for the Microbiology labs to function.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?
4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support:</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>06</td>
<td>300 Students</td>
<td>Over $200 Each</td>
<td>Biology</td>
</tr>
</tbody>
</table>

Description and part number for ordering:
Various Models for Instruction.

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
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<th>Shipping:</th>
<th>Total:</th>
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<tbody>
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<td>$1,703.00</td>
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</table>

One-time expenses: (e.g. construction, electrical, installation)
No construction or electrical installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
No repairs or annual maintenance is required.

Item to be shared with the following Department/Program: (Include any shared expenses)
Used among all biology classes

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   • ‘A’ means that your discipline cannot teach your course(s) without the requested equipment.
   • ‘B’ means that your course(s) would be greatly enhanced with the requested equipment.
   • ‘C’ means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

   B - These models are required for the continued education and instruction of our Anatomy students. Students continue to attend from other institutions and this would only help attract more future student to the College.
2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>07</td>
<td>144 Students</td>
<td>Over $200 Each</td>
<td>Biology</td>
</tr>
</tbody>
</table>

Description and part number for ordering:
spectronic 20+ spectrophotometers

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
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</thead>
<tbody>
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<td>$140.00</td>
<td>$4,640.00</td>
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</tbody>
</table>

One-time expenses: (e.g. construction, electrical, installation)
none

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
replacement of bulbs

Item to be shared with the following Department/Program: (Include any shared expenses)

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)

1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a
future academic year.

b, requested 3 times

Need to replace one that is well over tens years old and no longer functions. Need the second one to keep up with the capacity of labs that are currently using this equipment. Number of course offerings are increasing, and as such the demand for equipment increases. This purchase would help better serve the labs and students.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)
   no

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?
   This purchase will help better serve the students in the labs, it will help bring our labs into the 21st century.

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?
   144 students will be benefited by modernizing our lab offerings.

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?
   Demonstrate use of modern biological equipment.

6. How will these outcomes be measured for future planning? What data or evidence supports your request?
   Through lab practicals, our current equipment is broken and more than 12 years old.

Additional Justification for this item:

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I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority:</th>
<th>To Support:</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>08</td>
<td>28 Classes</td>
<td>Over $200 Each</td>
<td>Biology</td>
</tr>
</tbody>
</table>

Description and part number for ordering:

12L Digital water bath, 115V.

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
</tr>
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<td>$1,000.00</td>
<td>$0.00</td>
<td>$200.00</td>
<td>$2,200.00</td>
</tr>
</tbody>
</table>

One-time expenses: (e.g. construction, electrical, installation)
No special construction, electrical or installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
These items don't require annual maintenance or staffing. We currently have a few, but
require more due to the increase in demand from a number of labs.

**Item to be shared with the following Department/Program: (Include any shared expenses)**
Items will be shared between Microbiology, Biology 110, and Biology 115.

Do you have space for this equipment? Yes

**Justification for Item (See Rating Rubric)**
1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.
   
   B

Due to the high demand from multiple labs being offered during the same time blocks, additional water baths are required to continue to serve our students.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

**Additional Justification for this item:**

---

**I. Instructional Equipment/Materials Requirements**
Priority: To Support: Category Discipline Area
09 96 Students Over $200 Each Biology

Description and part number for ordering:
Antibiotic Disk Dispensers

<table>
<thead>
<tr>
<th>Qty</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>$1,000.00</td>
<td>$0.00</td>
<td>$200.00</td>
<td>$2,200.00</td>
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</table>

One-time expenses: (e.g. construction, electrical, installation)
No special construction, electrical or installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
These items don't require annual maintenance or staffing.

Item to be shared with the following Department/Program: (Include any shared expenses)
Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   • 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   • 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   • 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

   B this has been requested at least two times now.

Currently two are being used by 24 students in a lab. This is a safety issue when one has a group of students waiting to use just two pieces of equipment in the whole lab. To rectify this problem we need to purchase three more and bring the ratio of students to equipment from 12:1 down to approximately 5:1. This would make for a safe and efficient lab environment.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

   This would make for a safer lab environment and reduce our ratio of students to equipment from 12:1 to 5:1.
5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

Priority: To Support: Category Discipline Area
10 750 Students Over $200 Each biology

Description and part number for ordering:
Hepa Filter Vacuum System (something odd with $$ below)

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
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<tbody>
<tr>
<td>1</td>
<td>$413.00</td>
<td>$35.11</td>
<td>$528.11</td>
<td>$976.22</td>
</tr>
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</table>

One-time expenses: (e.g. construction, electrical, installation)
none

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
none

Item to be shared with the following Department/Program: (Include any shared expenses)
Biology, Natural History, and Geology

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   • ‘A’ means that your discipline cannot teach your course(s) without the requested equipment.
   • ‘B’ means that your course(s) would be greatly enhanced with the requested equipment.
   • ‘C’ means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

System would be used to maintain and care for current collections that serve numerous students, classes and programs.
2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support:</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>180 Students</td>
<td>Under $200</td>
<td>Each biology</td>
</tr>
</tbody>
</table>

Description and part number for ordering:
Ohaus Electronic Balances

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
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<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
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<td>$0.00</td>
<td>$75.00</td>
<td>$775.00</td>
</tr>
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</table>

One-time expenses: (e.g. construction, electrical, installation)
No special construction, electrical or installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
Unit would be maintained and care for by current staff. No additional staffing or upgrades would be needed.

Item to be shared with the following Department/Program: (Include any shared expenses)
These items would be shared with Environmental landscaping

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
• 'A' means that your discipline cannot teach your course(s) without the requested equipment.
• 'B' means that your course(s) would be greatly enhanced with the requested equipment.
• 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

C

These items would be shared with the Environmental Landscaping program.
A growing number of courses has forced upon us the need for additional balances.
With the addition of the Soils class as well as new labs developed for Biology 116, there is a growing need for more equipment to be able to better serve the students.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support:</th>
<th>Category</th>
<th>Discipline Area</th>
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</thead>
<tbody>
<tr>
<td>12</td>
<td>200 Students</td>
<td>Over $200 Each</td>
<td>Biology</td>
</tr>
</tbody>
</table>

Description and part number for ordering:
Orbital Shaker

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<thead>
<tr>
<th>Qty.</th>
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<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
</tr>
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<tbody>
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<td>$293.00</td>
<td>$124.00</td>
<td>$3,855.00</td>
</tr>
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</table>
One-time expenses: (e.g. construction, electrical, installation)
No special construction, electrical or installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
These items don't require annual maintenance or staffing.

Item to be shared with the following Department/Program: (Include any shared expenses)
Would be used by both Microbiology and Biology 115 (biology for majors).

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

   B

   This equipment would help further students education and knowledge of current laboratory procedures in the Biological science industry. Use of this equipment would allow students to perform new labs that would help update the current lesson plan.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:
I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support:</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>56 Students</td>
<td>Under $200</td>
<td>Each biology</td>
</tr>
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</table>

Description and part number for ordering:
Museum of Life posters

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
</tr>
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<tbody>
<tr>
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<td>$42.00</td>
<td>$253.58</td>
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</table>

One-time expenses: (e.g. construction, electrical, installation)
No construction, electrical or installation expenses.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
No annual maintenance, repairs or upgrade expenses.

Item to be shared with the following Department/Program: (Include any shared expenses)
Biology classes

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)

1. Indicate how important this item is to the life of your discipline.
   • 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   • 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   • 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

   B

   Posters would aide as a teaching tool for students involved in Biology 116. These posters would help students better understand concepts and ideas learned during lecture and lab.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

4. How will access for students be improved? How many students (annually) will benefit from...
this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>10 Classes</td>
<td>Over $200 Each</td>
<td>Biol/Geol</td>
</tr>
</tbody>
</table>

Description and part number for ordering:
2 (15 passenger vans) 1 4wd Pick-up truck

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
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<td>$0.00</td>
<td>$0.00</td>
<td>$120,000.00</td>
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</table>

One-time expenses: (e.g. construction, electrical, installation)
No special construction, electrical or installation is required.

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
These items would be shared between the Biology, Geology and Geography programs.

Item to be shared with the following Department/Program: (Include any shared expenses)
These items would be shared between the Biology, Geology and Geography programs.

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   • ‘A’ means that your discipline cannot teach your course(s) without the requested equipment.
   • ‘B’ means that your course(s) would be greatly enhanced with the requested equipment.
   • ‘C’ means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

B

By purchasing this equipment it would reduce the current cost of field courses for students by only charging them for maintenance and gas rather than a fee for rental vehicles. This purchase would also increase safety due to familiarity with the same vehicles rather than different vehicles everytime. By
reducing the cost to students the courses with a field component would become more attractive to students.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:
Technology Requests
Part I : Software
BIOL-2010

I. Technology/Software Requests
This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, IPC and Budget.

<table>
<thead>
<tr>
<th>Priority:</th>
<th>To Support:</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0 None</td>
<td>None</td>
<td>None</td>
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Description and part number for ordering:

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

Type | How often? | College-wide | Discipline-Specific |
None | None       | None         | None               |

Item to be shared with the following Department/Program: (Include any shared expenses)

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.
   In addition, how many times have you requested this item, but you have not received it?

2. Is this software required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

Additional Justification for this item:
I. Consumable Instructional Operating Supplies

This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, PRAC.

Note: Please group requests into broad categories of items required to teach a class. Make ONE entry for each category. Please enter only if your costs have gone up or down or you need additional funds for some reason. Don’t fill out if your supply budget has not changed.

Note: These are generally ongoing costs. One-time items go under Instructional Equipment.

**Priority:**

---

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support</th>
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</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>1200 Students</td>
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</tr>
</tbody>
</table>

**Broad Category (for example in Chemistry - "Chemicals")**

Biology

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Amount of Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>49709.0</td>
<td>42038.0</td>
<td>7671.0</td>
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</tbody>
</table>

**Type**

- Increasing Cost
- How Long? Ongoing/Recurring

**Item to be shared with the following Department/Program: (Include any shared expenses)**

**Justification for Item (See Rating Rubric)**

1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

In addition, how many times have you requested this item, but you have not received it?

---

**Additional Justification for this item:**

Supplies needed to run biology classes in academic year 2010-2011 plus summer session, 2010 (since supplies for summer must be purchased in May, 2010).

**2. Is it necessary for students to succeed in a series of courses?**

Yes

**3. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?**

These supplies are essential to run biology labs.

**4. What student learning or other outcomes are expected? Is it important to the achievement of student goals?**

Many of the SLO’s of our lab courses refer to the implementation of experiments and lab exercises that the students perform.

**5. How will these outcomes be measured for future planning? What data or evidence supports your request?**

The outcomes will be measured through assessment. These supplies are used in the foundational educational process of our biology labs.

---

Additional information:

- Biology Supplies Total: $42,038
- All accounts should be in non-restricted accounts. If Prop. 20 funds are used, they need to be in accounts by July 1st to allow purchases for Fall Semester.

---

Additional Justification:

Supplies needed to run biology classes in academic year 2010-2011 plus summer session, 2010 (since supplies for summer must be purchased in May, 2010).
### I. Consumable Instructional Operating Supplies

This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, PRAC.

Note: Please group requests into broad categories of items required to teach a class. Make ONE entry for each category. Please enter only if your costs have gone up or down or you need additional funds for some reason. Don’t fill out if your supply budget has not changed.

Note: These are generally ongoing costs. One-time items go under Instructional Equipment.

<table>
<thead>
<tr>
<th>Priority:</th>
<th>To Support:</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
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<td></td>
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</table>

### Broad Category (for example in Chemistry - "Chemicals")

Slide set for Biology courses

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Amount of Increase</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.0</td>
<td>2500.0</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>How Long?</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>New/Will be Recurring</td>
</tr>
</tbody>
</table>

**Item to be shared with the following Department/Program: (Include any shared expenses)**

These are replacements for slides that are used on a regular basis by over 1000 students annually. Over time glass slides are dropped by students and some slowly deteriorate over time. Many of the slides are well of 15 years old and are cracked and broken through repeated student abuse. These need to be replaced to better serve and educate our students in the Biology program.

### Justification for Item (See Rating Rubric)

1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.
   
   In addition, how many times have you requested this item, but you have not received it?

2. Is it necessary for students to succeed in a series of courses?
   
   Yes

3. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

   Approximately 1000 students a year will benefit. The slides through wear and tear, and breakage will constantly need to be replaced.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

   For student to succeed in some of the SLO's of our many lab courses, it is necessary that they students have microscope slides available.

5. How will these outcomes be measured for future planning? What data or evidence supports your request?

   These outcomes will be measured by assessment. These slides are a basic but essential component of our lab classes. These slides are crucial to the continued education of our students in the General Biology (BIOL110), Biology for majors (BIOL112A, BIOL112B & BIOL112C), Human Anatomy (BIOL120), and Microbiology (BIO240).
I. Consumable Instructional Operating Supplies

This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, PRAC.

Note: Please group requests into broad categories of items required to teach a class. Make ONE entry for each category. Please enter only if your costs have gone up or down or you need additional funds for some reason. Don’t fill out if your supply budget has not changed.

Note: These are generally ongoing costs. One-time items go under Instructional Equipment.

<table>
<thead>
<tr>
<th>Priority:</th>
<th>To Support:</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0</td>
<td>None</td>
</tr>
</tbody>
</table>

Broad Category (for example in Chemistry - "Chemicals")

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Amount of Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>How Long?</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Justification for Item (See Rating Rubric)

1. Indicate how important this item is to the life of your discipline.
   - 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   - 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   - 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

2. Is it necessary for students to succeed in a series of courses?

3. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

5. How will these outcomes be measured for future planning? What data or evidence supports your request?
II. Other Non-Instructional Costs

This section will be filled out by the Department Chair and reviewed by the Area Dean, IPC and Budget.

Note: Service Contracts: maintenance, repairs, laundry, hazardous waste removal, etc.

<table>
<thead>
<tr>
<th>Category</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Contracts</td>
<td>Previously funded with cost increase</td>
</tr>
</tbody>
</table>

Description and part number for ordering:

Increase in funds for Contract Services Agreement in the Biology program.

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>14174.0</td>
<td>11000.0</td>
</tr>
</tbody>
</table>

Justification

Please comment on request in terms of how it benefits your program, faculty and/or students:

The items that would receive servicing from these funds are used by a number of programs including Geology, Geography, Environmental Landscaping and occasionally Chemistry.

There are no construction, electrical, or installation expenses. This is a request for funds for the Contract service agreement account to pay for the cost of upkeep on equipment already purchased in the Biology program.

The funds would be used to help service various pieces of equipment. Some of the equipment would include newly acquired microscopes that need to be properly maintained to continue to function. Maintenance is also required on older microscopes (over 30 years old to be precise) to keep them barely functioning at the current level. A long term solution would be the acquisition of new microscopes; which is reflected under the Instructional Equipment request. Annual service is also conducted on the autoclave which is a vital tool required for the function of the Microbiology classes. There are also a number of balances that need to be calibrated, without this service all these expensive pieces of equipment are useless.
### Faculty Members

#### BIOL-2010

## I. Program Faculty

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agudelo-Silva</td>
<td>Fernando</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Status:**
- Shared W/other program(s):
- Full-time, probationary: Yes

<table>
<thead>
<tr>
<th>Summer 2009 TU</th>
<th>Fall 2009 TU</th>
<th>Spring 2010 TU</th>
<th>Reassigned (Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>0</td>
<td>0</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Years of Service:** 8

**Specialty:** Biology, microbiology, horticulture, engineering, public health, ecology

**Leadership:**
List involvement in committees or other service
- Chair of facilities planning committee for more than two years. With other com. members develop master list of facilities, criteria to rank facilities requests, establish computer driven system to track maintenance requests.
- Without formally reassigned units, have been instrumental in assisting coordination of Environmental Landscaping program.
- I have submitted two proposals to the Educational Excellence Innovation and obtained funding to establish sustainable garden. This garden is used to support teaching of various classes including nutrition.
- Proposed Irrigation Center which led to creation of partnerships with Marin Water District, California Landscape Contractors Association and Marin County Supervisors.
- Obtained grant from Bay Area Biotech group to purchase laboratory supplies and equipment.
- Assembled team that won award at the San Francisco Flower and Garden Show.
- Sponsor of Land Sustainability Club.

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boyce</td>
<td>Sima</td>
<td></td>
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</tr>
</tbody>
</table>

**Status:**
- Adjunct, ETCUM: No

<table>
<thead>
<tr>
<th>Summer 2009 TU</th>
<th>Fall 2009 TU</th>
<th>Spring 2010 TU</th>
<th>Reassigned (Total)</th>
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<tbody>
<tr>
<td>13</td>
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</tr>
</tbody>
</table>

**Years of Service:** 3

**Specialty:** List all areas of specialty and/or equivalency

**Leadership:**
List involvement in committees or other service

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
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</thead>
<tbody>
<tr>
<td>Brown</td>
<td>Becky L</td>
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</table>

**Status:**
- Full-time, probationary: No

<table>
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<th>Summer 2009 TU</th>
<th>Fall 2009 TU</th>
<th>Spring 2010 TU</th>
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<tr>
<td>38</td>
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</table>

**Years of Service:** 3

**Specialty:** Human Anatomy, Human Physiology, Ecology, Zoology, Field Biology

---

http://programreview.marin.edu/2010/TUReportFaculty.jsp

2/8/2011
Leadership: List involvement in committees or other service

Curriculum Committee
Various Hiring Committees
Technical Review Committee
User group for new science building

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
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</thead>
<tbody>
<tr>
<td>Bruce</td>
<td>Douglas</td>
<td>A.</td>
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</table>

Status: Shared W/other program(s):
Adjunct, ETCUM No

Summer 2009 TU Fall 2009 TU Spring 2010 TU Reassigned (Total)
8 10 00.000

Years of Service: Specialty:
2 Majors general biology, intro biology, entomology, evolution, field biology, genetics, physiology, nutrition

Leadership: List involvement in committees or other service

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
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<tr>
<th>Last Name</th>
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<tbody>
<tr>
<td>Cunningham</td>
<td>James</td>
<td>B.</td>
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</table>

Status: Shared W/other program(s):
Adjunct, ETCUM No

Summer 2009 TU Fall 2009 TU Spring 2010 TU Reassigned (Total)
10 00.000

Years of Service: Specialty:
21 Ornithology, Ecology, General Biology

Leadership: List involvement in committees or other service

Full-time professor at Dominican University of California (and member of several governance committees there)

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

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<tbody>
<tr>
<td>da Silva</td>
<td>Paul</td>
<td>G</td>
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</tbody>
</table>

Status: Shared W/other program(s):
Full-time, tenured No

Summer 2009 TU Fall 2009 TU Spring 2010 TU Reassigned (Total)
33 3

Years of Service: Specialty:
11 Entomology, Ecology, Environmental Science, Plant Science, History of Science

Leadership: List involvement in committees or other service

Have served on Curriculum Committee, Instructional Equipment Committee, Calendar Option Committee, Sabbatical Leave Committee, Educational Master Plan Committee, Environmental Landscaping Advisory Committee, Environmental Science Advisory Committee, numerous Hiring Committees

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

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<tr>
<td>Deneris</td>
<td>Jamie</td>
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</table>

Status: Shared W/other program(s):
Full-time, tenured

Summer 2009 TU Fall 2009 TU Spring 2010 TU Reassigned (Total)
40.500 00.000
### Years of Service: Specialty:

14  
**Microbiology, Molecular and Cell Biology, Evolutionary Biology, Field Biology and Ecology**

### Leadership: List involvement in committees or other service

- Health and Safety Committee
- Sabbatical Leave Committee
- Guest lecturer in other departments on campus most semesters
- Point Reyes National Seashore
- Hawaii Volcanoes National Park
- Great Basin National Park
- Northern California Biotechnology Consortium

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

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<tbody>
<tr>
<td>Egert</td>
<td>David</td>
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**Status:** Shared W/other program(s):

- Full-time, tenured: No

**Summer 2009 TU** | **Fall 2009 TU** | **Spring 2010 TU** | **Reassigned (Total)** |
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<td>34</td>
<td>3</td>
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</tbody>
</table>

### Years of Service: Specialty:

8  
**Human Physiology and Anatomy, Neurobiology, Systems & Control Theory, Engineering**

### Leadership: List involvement in committees or other service

- Institutional Planning Committee
- Life and Earth Sciences Department Chair
- Various Hiring Committees (Biology and Chemistry faculty, as well as Science Center Computer resource person)

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

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<tbody>
<tr>
<td>Gamal</td>
<td>Arif</td>
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**Status:** Shared W/other program(s):

- Adjunct, ETCUM: No

**Summer 2009 TU** | **Fall 2009 TU** | **Spring 2010 TU** | **Reassigned (Total)** |
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</tbody>
</table>

### Years of Service: Specialty:

7  
**Human Anatomy and Physiology, Human Sexuality**

### Leadership: List involvement in committees or other service

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
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<tr>
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<tbody>
<tr>
<td>Gearhart</td>
<td>Anne</td>
<td></td>
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</table>

**Status:** Shared W/other program(s):

- Emergency Hire: No

**Summer 2009 TU** | **Fall 2009 TU** | **Spring 2010 TU** | **Reassigned (Total)** |
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</table>

### Years of Service: Specialty:

1

### Leadership: List involvement in committees or other service

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
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<tbody>
<tr>
<td>Glazebrook</td>
<td>Catriona</td>
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**Status:** Shared W/other program(s):

- Emergency Hire: No
<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
<th>Status:</th>
<th>Shared W/other program(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harms</td>
<td>Sharon</td>
<td></td>
<td></td>
<td>Adjunct, ETCUM</td>
<td>No</td>
</tr>
<tr>
<td>Lenarz</td>
<td>William</td>
<td></td>
<td></td>
<td>Adjunct, ETCUM</td>
<td>No</td>
</tr>
<tr>
<td>Mahmoud</td>
<td>Eiman</td>
<td></td>
<td></td>
<td>Emergency Hire</td>
<td>No</td>
</tr>
<tr>
<td>Messana</td>
<td>Benedict</td>
<td></td>
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<td>Adjunct, ETCUM</td>
<td>No</td>
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</table>
**Leadership: List involvement in committees or other service**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mueller</td>
<td>Joe</td>
<td></td>
<td></td>
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<tr>
<td>Status:</td>
<td>Shared W/other program(s):</td>
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<td>Summer 2009 TU</td>
<td>Fall 2009 TU</td>
<td>Spring 2010 TU</td>
<td>Reassigned (Total)</td>
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<tr>
<td></td>
<td>44</td>
<td>00.000</td>
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</tbody>
</table>

**Years of Service:** Specialty:
- Marine biology, ornithology, mammalogy, ecology, environmental science, field biology, aquatic biology, human sexuality, animal behavior, zoology, extended field studies Alaska/Pacific Northwest/Southwest/Yellowstone, herpetology, marine mammals, marine ecology field studies.

**Leadership: List involvement in committees or other service**

- Senator and Academic Senate. Various hiring committees. Coordinated and revitized Bolinas Marine Lab (12 years). Faculty advisor for COM Envirmental Action Club (16 years). Hiring committees for Marin County Parks and Open Space. Senior Member Bolinas Lagoon Technological Advisory Committee (12 years). Curriculum Advisor for Environmental Forum of Marin, Lecturer/Speaker every two weeks for one or more: Marin Audubon So, Audubon Canyon Ranch, Hungary Owl Project, Environmental Forum of Marin, Local State, Federal and County parks docent/nature education programs and ranger training. Educator Point Reyes Field Seminars, Point Reyes National Seashore, Farallones National Marine Sanctuary and most local environmental education institutions. Cares for 50 animals (llamas to lizards) used for nature education.

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richards</td>
<td>Sandy</td>
<td></td>
<td></td>
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<tr>
<td>Status:</td>
<td>Shared W/other program(s):</td>
<td>Emergency Hire</td>
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<tr>
<td>Summer 2009 TU</td>
<td>Fall 2009 TU</td>
<td>Spring 2010 TU</td>
<td>Reassigned (Total)</td>
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</table>

**Years of Service:** Specialty:
- Nutrition

**Leadership: List involvement in committees or other service**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
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<tbody>
<tr>
<td>Rodriguez</td>
<td>Elena</td>
<td></td>
<td></td>
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<tr>
<td>Status:</td>
<td>Shared W/other program(s):</td>
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<td>No</td>
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<tr>
<td>Summer 2009 TU</td>
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**Years of Service:** Specialty:
- List all areas of specialty and/or equivalency

**Leadership: List involvement in committees or other service**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
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<tbody>
<tr>
<td>Schinkae</td>
<td>Jeff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status:</td>
<td>Shared W/other program(s):</td>
<td>Temp Pool</td>
<td>No</td>
</tr>
</tbody>
</table>

| Summer 2009 TU | Fall 2009 TU | Spring 2010 TU | Reassigned (Total) |
|               |             |               |                  |
Leadership: List involvement in committees or other service

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
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<tbody>
<tr>
<td>Smith</td>
<td>Victor</td>
<td>G</td>
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</table>

Status: Shared W/other program(s):
Temp Pool No

Summer 2009 TU Fall 2009 TU Spring 2010 TU Reassigned (Total)
10 00.000

2

Leadership: List involvement in committees or other service

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waldman</td>
<td>Leslie</td>
<td>R.</td>
<td></td>
</tr>
</tbody>
</table>

Status: Shared W/other program(s):
Adjunct, ETCUM No

Summer 2009 TU Fall 2009 TU Spring 2010 TU Reassigned (Total)
24 00.000

Years of Service: Specialty: Neuroscience, Human Physiology and Anatomy, Zoology, Evolutionary Biology
3

Leadership: List involvement in committees or other service

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Williams</td>
<td>Jeannine</td>
<td>D.</td>
<td></td>
</tr>
</tbody>
</table>

Status: Shared W/other program(s):
Adjunct, ETCUM No

Summer 2009 TU Fall 2009 TU Spring 2010 TU Reassigned (Total)
16 00.000

Years of Service: Specialty: Microbiology, Physiology, Virology, and Immunology, Zoology
4

Leadership: List involvement in committees or other service

Additional Teaching Unit Requests

II. Additional Unit requests for NEW classes or extra sections (requests for returned units has different process).

Specialty: Units/Class Number of Sections/Year Existing or New Course
Biology 110, 100 3 2 Existing Course

To meet Program requirements for the following:

- Health/Safety
- Scheduling
- Title 5/Ed.Code
- Waitlists

Other:
If it is for a new course, has the outline been submitted and approved by curriculum, UDWC and the Board?

Justification for new units:

1. Why do you feel this is an important addition to your overall curriculum and/or number of offerings?
2. Is it or will it be required for a degree or certificate?
3. Is it a new state law requirement?
4. How will this improve access, student learning outcomes and success?
5. Do you have evidence to support the need for your request? If so, please explain and/or attach.

The above classes are pre-requisites for many classes and programs (also GE) for COM students, and always have a wait-list. We turn away students every semester.

Shared Resources: If you have requested additional units that will be used by more than one department, please indicate here. Please indicate which disciplines and/or departments and the number of combined students/faculty or classes he/she would serve. Please indicate how it will improve access or outcomes and if it is needed for health and safety concerns or required by law.

III. FT Faculty Needs (Please fill this out ONLY if you are stating a need for new full time faculty in your area.)

1. Please indicate if there are NO FT faculty in your discipline. Please provide data regarding the length of time this discipline has been without a full time instructor.

A FT faculty is needed in our department, a faculty who has been trained in the very latest biological techniques, to match the rapid advancements in our discipline.

2. Non-availability of part-time instructors in a subject area. Please provide evidence demonstrating the difficulty in finding part-time instructors to teach in the subject area.

3. RETCUM Faculty: How many FT faculty have retired in the past ten years. How many units are now taught by RETCUM faculty each year?

   one FT faculty retired in the past ten years

   No units are now taught by RETCUM

4. New FT Faculty: How many NEW FT faculty have been hired in past 10 years? Please list each faculty name and the year of employment. If this instructor is shared with another department, please list the equivalent FTE% for your department. Please list instructional equivalencies as necessary and if faculty member was the result of retreat rights.

   1 and 1/2

   Fernando Agudelo Silva was hired in 2005 as a 50% Biology instructor

   Becky Brown was hired in 2005 as a 100% biology instructor

5. Reduction in department TUs as a result of FT Faculty retirements or other significant causes? Please provide data that illustrates a change in teaching unit allocation as a direct result of FT faculty retirements within your department and how this may change in the coming year(s).

6. Other reasons: Have there been other causes for a reduction in units in your discipline? If so, please explain and provide evidence.

   The administration’s allotement of units has declines over the past few semesters, even when student enrollment and demand has increased.

7. Changes in Student Demand: Recent or forthcoming growth as a result of added sections due to enrollment demands. Provide evidence that illustrates the need for additional faculty due to increased student demand such as numbers of sections added and/or courses with waitlist totals showing a need for additional sections. What is the % of FTEF for this increase in units? If there has been a decline in student growth, please explain why.

   We have most of our classes filling completely with a substantial wait list. We currently have to turn many students away each semester.

8. Current of forthcoming changes that illustrate the immediate need of additional FT faculty within this department. Please outline all relevant circumstances that justify the priority of a FT hire in addition to those already outlined above. Consider changes in the field, changes in the job market and population shifts.

9. Program Review Findings: Indicate what trends you identified in your last program review that support the need for full time faculty hires. Tie these to the department and college mission.

   From looking at the student enrollment data, another FT instructor would help bring continuity to the department.

10. Other considerations: Include such information as matriculation needs, changes in student demand or community and job market needs, response to legislation, or rapid growth of the discipline.

11. Shared Resources: If you have requested FT faculty that will be used by more than one department, please indicate here. Please indicate which disciplines and/or departments and the number of combined students/faculty or classes he/she would serve. Please indicate how it will improve access or outcomes and if it is needed for health and safety concerns or required by law.
I. Program Faculty

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

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<tr>
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<td>Sima</td>
<td></td>
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<tr>
<td>Brown</td>
<td>Becky</td>
<td>L</td>
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Status: Shared W/other program(s):

Full-time, probationary

Summer 2009 TU Fall 2009 TU Spring 2010 TU Reassigned (Total)

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Leadership: List involvement in committees or other service

Chair of facilities planning committee for more than two years. With other com. members develop master list of facilities, criteria to rank facilities requests, establish computer driven system to track maintenance requests.

Without formally reassigned units, have been instrumental in assisting coordination of Environmental Landscaping program.

I have submitted two proposals to the Educational Excellence Innovation and obtained funding to establish sustainable garden. This garden is used to support teaching of various classes including nutrition.

Proposed Irrigation Center which led to creation of partnerships with Marin Water District, California Landscape Contractors Association nd Marin County Supervisors.

Obtained grant from Bay Area Biotech group to purchase laboratory supplies and equipment.

Assembled team that won award at the San Francisco Flower and Garden Show.

Sponsor of Land Sustainability Club.

Leadership: List involvement in committees or other service

List all areas of specialty and/or equivalency

Biology, microbiology, horticulture, engineering, public health, ecology
### Leadership: List involvement in committees or other service
- Curriculum Committee
- Various Hiring Committees
- Technical Review Committee
- User group for new science building

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruce</td>
<td>Douglas</td>
<td>A.</td>
<td></td>
</tr>
</tbody>
</table>

#### Status:
- Adjunct, ETCUM

#### Summer 2009 TU
- Fall 2009 TU
- Spring 2010 TU

#### Reassigned (Total)
- 8
- 00.000

#### Years of Service:
- Majors general biology, intro biology, entomology, evolution, field biology, genetics, physiology, nutrition

#### Leadership: List involvement in committees or other service
- Have served on Curriculum Committee, Instructional Equipment Committee, Calendar Option Committee, Sabbatical Leave Committee, Educational Master Plan Committee, Environmental Landscaping Advisory Committee, Environmental Science Advisory Committee, numerous Hiring Committees

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cunningham</td>
<td>James</td>
<td>B.</td>
<td></td>
</tr>
</tbody>
</table>

#### Status:
- Adjunct, ETCUM

#### Summer 2009 TU
- Fall 2009 TU
- Spring 2010 TU

#### Reassigned (Total)
- 10
- 00.000

#### Years of Service:
- Ornithology, Ecology, General Biology

#### Leadership: List involvement in committees or other service
- Full-time professor at Dominican University of California (and member of several governance committees there)

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>da Silva</td>
<td>Paul</td>
<td>G</td>
<td></td>
</tr>
</tbody>
</table>

#### Status:
- Full-time, tenured

#### Summer 2009 TU
- Fall 2009 TU
- Spring 2010 TU

#### Reassigned (Total)
- 33
- 3

#### Years of Service:
- Entomology, Ecology, Environmental Science, Plant Science, History of Science

#### Leadership: List involvement in committees or other service

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deneris</td>
<td>Jamie</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Status:
- Full-time, tenured

#### Summer 2009 TU
- Fall 2009 TU
- Spring 2010 TU

#### Reassigned (Total)
- 40.500
- 00.000

---

http://programreview.marin.edu/2010/TUReportFaculty.jsp
<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired</th>
<th>Status:</th>
<th>Shared W/other program(s):</th>
<th>Years of Service</th>
<th>Specialty:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egert</td>
<td>David</td>
<td></td>
<td></td>
<td>Full-time, tenured</td>
<td>No</td>
<td>14</td>
<td>Microbiology, Molecular and Cell Biology, Evolutionary Biology, Field Biology and Ecology</td>
</tr>
<tr>
<td>Gamal</td>
<td>Arif</td>
<td></td>
<td></td>
<td>Adjunct, ETCUM</td>
<td>No</td>
<td>7</td>
<td>Human Physiology and Anatomy, Neurobiology, Systems &amp; Control Theory, Engineering</td>
</tr>
<tr>
<td>Gearhart</td>
<td>Anne</td>
<td></td>
<td></td>
<td>Emergency Hire</td>
<td>No</td>
<td>1</td>
<td>Human Anatomy and Physiology, Human Sexuality</td>
</tr>
<tr>
<td>Glazebrook</td>
<td>Catriona</td>
<td></td>
<td></td>
<td>Emergency Hire</td>
<td>No</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Leadership: List involvement in committees or other service**

- Health and Safety Committee
- Sabbatical Leave Committee
- Guest lecturer in other departments on campus most semesters
- Point Reyes National Seashore
- Hawaii Volcanoes National Park
- Great Basin National Park
- Northern California Biotechnology Consortium

**List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired</th>
<th>Status:</th>
<th>Shared W/other program(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egert</td>
<td>David</td>
<td></td>
<td></td>
<td>Full-time, tenured</td>
<td>No</td>
</tr>
<tr>
<td>Gamal</td>
<td>Arif</td>
<td></td>
<td></td>
<td>Adjunct, ETCUM</td>
<td>No</td>
</tr>
<tr>
<td>Gearhart</td>
<td>Anne</td>
<td></td>
<td></td>
<td>Emergency Hire</td>
<td>No</td>
</tr>
<tr>
<td>Glazebrook</td>
<td>Catriona</td>
<td></td>
<td></td>
<td>Emergency Hire</td>
<td>No</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>MI</td>
<td>Year Retired:</td>
<td></td>
<td></td>
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<tr>
<td>-----------</td>
<td>------------</td>
<td>----</td>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harms</td>
<td>Sharon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lenarz</td>
<td>William</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mahmoud</td>
<td>Eiman</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Messana</td>
<td>Benedict</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Leadership: List involvement in committees or other service

- Is liaison with Environmental Education Council of Marin
- Fisheries biology, population ecology
- Human Anatomy, ???
Leadership: List involvement in committees or other service

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mueller</td>
<td>Joe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Status: Shared W/other program(s):
Full-time, tenured

Summer 2009 TU | Fall 2009 TU | Spring 2010 TU | Reassigned (Total) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>44</td>
<td>0</td>
<td>00.000</td>
</tr>
</tbody>
</table>

Years of Service: Specialty:
- Marine biology, ornithology, mammalogy, ecology, environmental science, field biology, aquatic biology, human sexuality, animal behavior, zoology, extended field studies Alaska/Pacific Northwest/Southwest/Yellowstone, herpetology, marine mammals, marine ecology field studies.

Leadership: List involvement in committees or other service

Senator and Academic Senate. Various hiring committees. Coordinated and revitalized Bolinas Marine Lab (12 years). Faculty advisor for COM Envirmental Action Club (16 years). Hiring committees for Marin County Parks and Open Space. Senior Member Bolinas Lagoon Technological Advisory Committee (12 years). Curriculum Advisor for Environmental Forum of Marin. Lecturer/Speaker every two weeks for one or more: Marin Audubon So, Audubon Canyon Ranch, Hungary Owl Project, Environmental Forum of Marin, Local State, Federal and County parks docent/nature education programs and ranger training. Educator Point Reyes Field Seminars, Point Reyes National Seashore, Farallones National Marine Sanctuary and most local environmental education institutions. Cares for 50 animals (llams to lizards) used for nature education.

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richards</td>
<td>Sandy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Status: Emergency Hire

Summer 2009 TU | Fall 2009 TU | Spring 2010 TU | Reassigned (Total) |
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>00.000</td>
</tr>
</tbody>
</table>

Years of Service: Specialty:
Nutrition

Leadership: List involvement in committees or other service

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rodriguez</td>
<td>Elena</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Status: Emergency Hire

Summer 2009 TU | Fall 2009 TU | Spring 2010 TU | Reassigned (Total) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>0</td>
<td>00.000</td>
</tr>
</tbody>
</table>

Years of Service: Specialty:
List all areas of specialty and/or equivalency

Leadership: List involvement in committees or other service

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schinkae</td>
<td>Jeff</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Status: Temp Pool

Summer 2009 TU | Fall 2009 TU | Spring 2010 TU | Reassigned (Total) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Additional Teaching Unit Requests

II. Additional Unit requests for **NEW** classes or extra sections (requests for returned units has different process).

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Units/Class</th>
<th>Number of Sections/Year</th>
<th>Existing or New Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 110, 100</td>
<td>3</td>
<td>2</td>
<td>Existing Course</td>
</tr>
</tbody>
</table>

To meet Program requirements for the following:

- [ ] Health/Safety
- [ ] Scheduling
- [ ] Title 5/Ed.Code
- [x] Waitlists

Other:

If it is for a new course, has the outline been submitted and approved by curriculum, UDWC and the Board?

Justification for new units:

1. Why do you feel this is an important addition to your overall curriculum and/or number of offerings?
2. Is it or will it be required for a degree or certificate?
3. Is it a new state law requirement?
4. How will this improve access, student learning outcomes and success?
5. Do you have evidence to support the need for your request? If so, please explain and/or attach.

The above classes are pre-requisites for many classes and programs (also GE) for COM students, and always have a wait-list. We turn away students every semester.

**Shared Resources:** If you have requested additional units that will be used by more than one department, please indicate here. Please indicate which disciplines and/or departments and the number of combined students/faculty or classes he/she would serve. Please indicate how it will improve access or outcomes and if it is needed for health and safety concerns or required by law.

---

**III. FT Faculty Needs (Please fill this out ONLY if you are stating a need for new full time faculty in your area.)**

1. Please indicate if there are NO FT faculty in your discipline. Please provide data regarding the length of time this discipline has been without a full time instructor.

A FT faculty is needed in our department, a faculty who has been trained in the very latest biological techniques, to match the rapid advancements in our discipline.

2. Non-availability of part-time instructors in a subject area. Please provide evidence demonstrating the difficulty in finding part-time instructors to teach in the subject area.

3. RETCUM Faculty: How many FT faculty have retired in the past ten years. How many units are now taught by RETCUM faculty each year?
   - one FT faculty retired in the past ten years
   - No units are now taught by RETCUM

4. New FT Faculty: How many NEW FT faculty have been hired in past 10 years? Please list each faculty name and the year of employment. If this instructor is shared with another department, please list the equivalent FTE% for your department. Please list instructional equivalencies as necessary and if faculty member was the result of retreat rights.
   - 1 and 1/2
     - Fernando Agudelo Silva was hired in 2005 as a 50% Biology instructor
     - Becky Brown was hired in 2005 as a 100% biology instructor

5. Reduction in department TUs as a result of FT Faculty retirements or other significant causes? Please provide data that illustrates a change in teaching unit allocation as a direct result of FT faculty retirements within your department and how this may change in the coming year(s).

6. Other reasons: Have there been other causes for a reduction in units in your discipline? If so, please explain and provide evidence.

The administration’s allotment of units has declines over the past few semesters, even when student enrollment and demand has increased.

7. Changes in Student Demand: Recent or forthcoming growth as a result of added sections due to enrollment demands. Provide evidence that illustrates the need for additional faculty due to increased student demand such as numbers of sections added and/or courses with waitlist totals showing a need for additional sections. What is the % of FTEF for this increase in units? If there has been a decline in student growth, please explain why.

We have most of our classes filling completely with a substantial wait list. We currently have to turn many students away each semester.

8. Current of forthcoming changes that illustrate the immediate need of additional FT faculty within this department. Please outline all relevant circumstances that justify the priority of a FT hire in addition to those already outlined above. Consider changes in the field, changes in the job market and population shifts.

9. Program Review Findings: Indicate what trends you identified in your last program review that support the need for full time faculty hires. Tie these to the department and college mission.

From looking at the student enrollment data, another FT instructor would help bring continuity to the department.

10. Other considerations: Include such information as matriculation needs, changes in student demand or community and job market needs, response to legislation, or rapid growth of the discipline.

11. Shared Resources: If you have requested FT faculty that will be used by more than one department, please indicate here. Please indicate which disciplines and/or departments and the number of combined students/faculty or classes he/she would serve. Please indicate how it will improve access or outcomes and if it is needed for health and safety concerns or required by law.
Department Chair Comments
BIOL-2010

1. Please make any comments on the Five Pathways, Student Access and Success, Facilities, Curriculum and SLO sections.

For students to succeed in the Biology courses that they enroll in, it is essential that the department has the proper Biology equipment and supplies, in this rapidly changing field.

2. Please comment on the instructional equipment requests, technology requests and other instructional materials requests sections. Please comment especially on any specific priorities without which this program cannot function.

We have been granted instructional equipment in our laboratories, and the positive effects are being seen already. We still have many types of Biology equipment that we have requested, but not have been granted. Many of the pieces of equipment that we currently have, we can't even get replacement parts because the equipment is so old and outdated.

3. Please comment on the faculty and staff sections.

We continue to turn students away in many of our sections that we offer. More TU's and more FT faculty would really make a difference.

4. Other comments
Area Directors and Deans Comments
BIOL-2010

1. Please make any comments on the Five Pathways, Student Access and Success, Facilities, Curriculum and SLO sections.

2. Please comment on the instructional equipment requests, technology requests and other instructional materials requests sections. Please comment especially on any specific priorities without which this program cannot function.

I have read and reviewed the instructional equipment requests from this department, and all items requested are needed and justified. Much of the equipment used in the biology discipline at College of Marin is outdated and in need of replacement...with other equipment justified merely to bring the department into the late 20th century. The summary of the requests is listed below, in priority order. I strongly support the acquisition of as many items below as is possible.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
<th>Unit Cost</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>pH meters</td>
<td>500</td>
<td>4</td>
<td>2,100</td>
</tr>
<tr>
<td>2</td>
<td>PROCELL set</td>
<td>759</td>
<td>1</td>
<td>884</td>
</tr>
<tr>
<td>3</td>
<td>Updated Power Lab System</td>
<td>47,100</td>
<td>1</td>
<td>50,950</td>
</tr>
<tr>
<td>4</td>
<td>Microscopes</td>
<td>2,700</td>
<td>24</td>
<td>70,146</td>
</tr>
<tr>
<td>5</td>
<td>Gas Pak Jar</td>
<td>800</td>
<td>2</td>
<td>1,750</td>
</tr>
<tr>
<td>6</td>
<td>Models</td>
<td>1,385</td>
<td>1</td>
<td>1,703</td>
</tr>
<tr>
<td>7</td>
<td>Spectronic 20</td>
<td>2,250</td>
<td>2</td>
<td>4,630</td>
</tr>
<tr>
<td>8</td>
<td>12L Digital Water Bath</td>
<td>1,000</td>
<td>2</td>
<td>2,200</td>
</tr>
<tr>
<td>9</td>
<td>Antibiotic Disk Dispenser</td>
<td>1,000</td>
<td>2</td>
<td>2,200</td>
</tr>
<tr>
<td>10</td>
<td>Hepa Filter Vacuum System</td>
<td>413</td>
<td>1</td>
<td>580</td>
</tr>
<tr>
<td>11</td>
<td>Ohaus Electronic Balance</td>
<td>175</td>
<td>4</td>
<td>775</td>
</tr>
<tr>
<td>12</td>
<td>Orbital Shaker</td>
<td>3,438</td>
<td>1</td>
<td>3,855</td>
</tr>
<tr>
<td>13</td>
<td>Posters (Museum of Life)</td>
<td>195</td>
<td>1</td>
<td>253</td>
</tr>
<tr>
<td>14</td>
<td>(2) Vans &amp; 1 pickup truck</td>
<td>60,000</td>
<td>1</td>
<td>60,000</td>
</tr>
</tbody>
</table>

Additionally, the department requests an increase in the contract services budget, which is also needed to support the aging equipment. Examples are some microscopes which are over thirty years old as well as an autoclave that dates to the 1960s.

3. Please comment on the faculty and staff sections.

The department request for another full-time faculty member is justified, as well as the increase in the unit allocation. We have wait lists in several of the courses in the discipline and a large proportion of the units that are taught are offered by our part-time instructional staff.

4. Please itemize expenses currently covered by external funds that may revert back to general funds.

5. Other comments