## 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>Team Member</td>
<td><a href="mailto:Paul.daSilva@marin.edu">Paul.daSilva@marin.edu</a></td>
<td>7542</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>David Egert</td>
<td>Primary Team Member</td>
<td><a href="mailto:david.egert@marin.edu">david.egert@marin.edu</a></td>
<td>x7539</td>
<td>Instructional Equipment</td>
<td></td>
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</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>Laura McCarty and Erik Dunmire</td>
<td>Facilities Committee Co-Chairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sara McKinnon</td>
<td>Planning and Resource Allocation Committee Co-Chair/Academic Senate President</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td>Planning and Resource Allocation Committee Co-Chair/Instructional Equipment Chair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sara McKinnon, Yolanda Bellisimo and Anne Gearhart</td>
<td>Program Review Committee Chair and SLO Coordinators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</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>
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</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>
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</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.

### Importance:
- '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?

### I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Importance</th>
<th>Priority</th>
<th>Category</th>
<th>Area</th>
<th>Disciplines</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>01</td>
<td>Over</td>
<td>Biology</td>
<td></td>
</tr>
</tbody>
</table>

#### Description and part number for ordering:
Equipment for teaching labs in Environmental Science, Ecology, Soils, etc. - 2 Gravity convection ovens; 4 electronic scales w/power supplies;

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

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

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

#### Item to be shared with the following Department/Program: (Include any shared expenses)
To be shared with General Biology and Environmental Science

#### Do you have space for this equipment? Yes

#### Justification for Item (See Rating Rubric)
1. 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)

2. 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 supports five classes: General Ecology, Soils; Ecology and Management, Environmental Science, and Biology for Majors 112B. To achieve SLO's of the classes, students conduct laboratory exercises to assess: Primary productivity of plants; Soil water retention capability; and Determine variation of environmental parameters in field experiments.
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?

This equipment serves multiple classes and allows for conducting important labs necessary to achieve course SLOs.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals? How will these outcomes be measured for future planning? What data or evidence supports your request?

See course outlines. This equipment is necessary to run the labs that address the course SLOs.

5. Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Importance</th>
<th>Priority</th>
<th>To Support Annualy</th>
<th>Discipline Area</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>01</td>
<td>&gt;4200 Students</td>
<td>Over $200</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Mathematics,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and more</td>
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</table>

Description and part number for ordering:
Updated computers for the Science Center Computer Lab - OptiPlex 390, w/ 4 GB RAM and 19 inch monitor x 50 seats

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<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping: Total:</th>
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<tr>
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<td>$57.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$42,508.53</td>
</tr>
</tbody>
</table>

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

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

Item to be shared with the following Department/Program: (Include any shared expenses)
All Life and Earth Science, Physical Science, Mathematics, and more

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. 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)

2. 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?
Our new science center will have fifty seats. We currently have 30 outdated machines to populate that lab. It is necessary to have an adequate quantity and quality of computers if the lab to be a useful resource for our students.

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?
Students will be able to use the computers to work on their assignment and class work. Many classes and students utilize the Science Center Computer lab. In fall semester, there are 7 regularly scheduled classes: COMP 130, COMP 135, COMP 160, COMP 220, GEOG 125, ENGG/COMP 111, ENGG 125; several intermittent classes: Geog 101 labs, Biol 224 labs, Chem 131 for excel; and Comm Ed on weekends. In spring semester, there are 6 regularly scheduled classes: COMP/MATH 117, COMP 130, COMP 232, COMP 235, ENGG/COMP 150, GEOG 127; several intermittent classes: Biol 224 labs, Chem various for excel; and Comm Ed on weekends. The lab is also serving approximately 3,600 walk-in students from various disciplines, including outside the Math/Science departments, per semester.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals? How will these outcomes be measured for future planning? What data or evidence supports your request?

Students will have a viable computer lab to support their learning. This is also provides social equity and allows computer access for all our students whether or not they can afford the hardware and/or software needed to succeed in their studies.

5. Additional Justification for this item:

Note: We have heard that the college is planning to purchase new computers and this lab is at the top of the list. If this goes through, we may have these machines by mid-semester. If not, these computers will still be a very high priority.

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Importance</th>
<th>Priority</th>
<th>To Support Annually:</th>
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<tr>
<td>B</td>
<td>01</td>
<td>Category</td>
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<td></td>
<td></td>
<td>Discipline Area</td>
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<tr>
<td></td>
<td></td>
<td>Life and Earth Science, Physical Science, Mathematics</td>
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<td>Over $200</td>
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<td></td>
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<td>$200</td>
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<td></td>
<td></td>
<td>&gt;4200 Students Each</td>
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</table>

Description and part number for ordering:
Heavy Duty Printer for the Science Center Computer Lab - HP LJ P3015DN 42PPM B&W laser printer w/ 4 yr warranty

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<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
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<tr>
<td>1</td>
<td>$902.60</td>
<td>$59.99</td>
<td>$19.99</td>
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</table>

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

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

The price includes a four year warranty. In addition, the Computer Lab tech will perform general maintenance.

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

Biology, Geology, Geography, Chemistry, Physics, Mathematics, etc.

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)

1. 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)

2. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in
Students often have need to print their assignments, work, papers, spreadsheets, graphs, etc. while working in the computer lab. Our current printer in that lab is currently failing and will not last much longer given the heavy use it sees.

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?

Many classes and students utilize the Science Center Computer lab. In fall semester, there are 7 regularly scheduled classes: COMP 130, COMP 135, COMP 160, COMP 220, GEOG 125, ENGG/COMP 111, ENGG 125; several intermittent classes: Geog 101 labs, Biol 224 labs, Chem 131 for excel; and Comm Ed on weekends. In spring semester, there are 6 regularly scheduled classes: COMP/MATH 117, COMP 130, COMP 232, COMP 235, ENGG/COMP 150, GEOG 127; several intermittent classes: Biol 224 labs, Chem various for excel; and Comm Ed on weekends. The lab is also serving approximately 3,600 walk-in students from various disciplines, including outside the Math/Science departments, per semester. All these students use the printer and will benefit from a reliable printer at their disposal.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals? How will these outcomes be measured for future planning? What data or evidence supports your request?

We expect students to be able to print their assignments. Many classes require hardcopy printouts of papers, charts, etc. that students must turn in for evaluation.

5. Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Importance</th>
<th>Priority</th>
<th>To Support Annually</th>
<th>Discipline Category</th>
<th>Discipline Area</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>01</td>
<td>7 Classes</td>
<td>Over $200</td>
<td>Biology</td>
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</tbody>
</table>

Description and part number for ordering:
Microbiology Equipment to replace old, failing equipment. Includes: 1 Shaking Water Bath; 4 Basic Stirring Hot Plates (11x11cm); 2 Basic Stirring Hot Plates (18x18cm); 2 GasPak 150 Systems; 2 Laboratory Blenders; Case of 48 Dilution Bottles.

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<tr>
<th>Qty</th>
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<tr>
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One-time expenses: (e.g. construction, electrical, installation)

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

These items will be maintained by our Microbiology Lab Technician.

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

Sharing will occur with the Allied Health and Natural History Programs.

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)
1. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)

In this equipment required to meet any local, state or federal Health and Safety 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)

These items are necessary to teach to set up and run our microbiology labs and have students achieve student learning outcomes as per the course outlines.

2. 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?

Our current equipment to run our microbiology labs is over 30 years old and failing. We are reaching the point where we can’t keep our current equipment running any longer and we won’t be able to run our microbiology labs without replacing it.

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?

See above. Again, we won’t be able to run our microbiology labs without replacing our currently failing equipment.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals? How will these outcomes be measured for future planning? What data or evidence supports your request?

These items are necessary to teach to set up and run our microbiology labs and have students achieve student learning outcomes as per the course outlines.

5. Additional Justification for this item:

Microbiology is a required class for students applying to nursing and is an impacted class with high enrollments and waitlists. It would reflect poorly on the college and results in a strong negative student reaction if we lost the ability to continue offering these classes due to lack of functioning equipment.

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Importance</th>
<th>Priority</th>
<th>To Support Annually:</th>
<th>Discipline Area</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>01</td>
<td>4 Classes</td>
<td>Biology</td>
</tr>
</tbody>
</table>

Description and part number for ordering:

Microscopes for our Majors Biology Classes: Leica DM750 Student Microscope with 4x Brightfield, 10x 40x 100x Oil Phase Contrast Objectives with Phase Turret Condensor. Includes delivery, setup and installation.

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<td>$0.00 $66,432.00</td>
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</table>

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

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

Day to day maintenance will be taken care of by our biology lab technician. Annual or biennial maintenance covered in contract services.

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

Sharing will occur with the Allied Health and Natural History Programs.
**Do you have space for this equipment?**

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

1. **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)

   These scopes are necessary to teach to teach the material well and have students achieve student learning outcomes as per the course outlines.

2. **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 Cell and Molecular Biology classes at COM are currently using outdated and poorly functioning microscopes that date back to the 1960’s. Students cannot make basic adjustments for proper illumination. The objective lenses are damaged, limiting clarity, and use is limited to brightfield microscopy. As a significant portion of the lab requires the use of compound microscopes, superior technology is needed. Students would be able to use techniques such as phase contrast and darkfield rather than simply being exposed to textbook images generated by these techniques. The lab experience could be greatly enriched by new microscopes and students would have superior tools for studying cells and cell structure.

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?**

   Over the past ten years, we have slowly been upgrading our microscopes in biology - so far in Anatomy and in Microbiology. The results have been dramatic in terms of improved student experience. In anatomy and microbiology, our students now have tools that facilitate their exploration of the microscopic world and excite them rather than discourage them as they currently struggle to achieve subpar images and get discouraged as they try to cover course material. Not only will it help existing students, but will increase the attractiveness of our major’s biology courses if students have access to quality instruments to learn the material.

4. **What student learning or other outcomes are expected? Is it important to the achievement of student goals? How will these outcomes be measured for future planning? What data or evidence supports your request?**

   See above. We have seen dramatically improved student experience in anatomy and microbiology with upgraded microscopes as our students now have tools that facilitate their exploration of the microscopic world and excite them rather than discourage them as they struggle to achieve subpar images and get discouraged as they try to cover course material.

5. **Additional Justification for this item:**

   To summarize: our Majors biology course in cell and molecular biology are currently using microscopes from the 1960’s that do not allow the students to achieve the images necessary to cover the material in the course outlines, resulting in discouraged and frustrated students as well as instructors. This is particularly troublesome given that this is in our flagship majors biology sequence here at COM. Note: due to volume discounts, the price for 24 microscopes will be a total of $66,428, whereas if we bought half that amount, 12 microscopes would still be $51,300 so it makes sense to buy the full amount all at once.

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### I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Importance</th>
<th>Priority</th>
<th>To Support Annually:</th>
<th>Discipline Area</th>
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<tbody>
<tr>
<td>A</td>
<td>01</td>
<td>250 Students Each</td>
<td>Biology</td>
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</table>

**Description and part number for ordering:**

Prepared Microscope Slide Specimens for Human Anatomy, Microbiology and Majors' Biology

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<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
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<tbody>
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<td>$2,800.00</td>
<td>$225.00</td>
<td>$280.00 $3,305.00</td>
</tr>
</tbody>
</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)

Sharing will occur with the Allied Health and Natural History Programs.

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)

1. 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)

Many old slides have jagged glass edges which could cut students' hands

2. 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?
Students will benefit from being able to see the tissues that they need to study. This is not the case with the old sets where many are broken or have shattered coverslips. If they do not see anything, they cannot study it.

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?

Many students become discouraged when they cannot see anything in the old slides now in use, some of which date from 1950 and have been in use ever since. This could lower our rates for student success.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals? How will these outcomes be measured for future planning? What data or evidence supports your request?

Ability to identify cells and tissues is a key student learning outcome of all of these courses. Each course has laboratory practical exams to test mastery of this skill.

5. Additional Justification for this item:

These courses are critical to student success in achieving goals of transfer and certificate completion.

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I. Instructional Equipment/Materials Requirements

<table>
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<tr>
<th>Importance</th>
<th>Priority</th>
<th>To Support</th>
<th>Category</th>
<th>Discipline Area</th>
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</thead>
<tbody>
<tr>
<td>B</td>
<td>02</td>
<td>Annually:</td>
<td>Over</td>
<td>biology, enviromental science</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$200</td>
<td>Each</td>
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<td></td>
<td></td>
<td>3 Classes</td>
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Description and part number for ordering:

Data Logger - from EME Systems. Customized to record temperature, humidity, wind, solar energy, etc.

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<th>Qty.</th>
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</table>

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

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

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. 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)

2. 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 supports classes such as General Ecology and Environmental Science and will allow students conduct laboratories that determine variations of environmental parameters in field experiments that are part of a rigorous ecology curriculum.

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?
This equipment supports classes such as General Ecology and Environmental Science and will allow students conduct laboratories that determine variations of environmental parameters in field experiments.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals? How will these outcomes be measured for future planning? What data or evidence supports your request?
Students will be able to conduct experiments that are part of a rigorous ecology and environmental science curriculum.

5. Additional Justification for this item:

I. Instructional Equipment/Materials Requirements

<table>
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<tr>
<th>Importance:</th>
<th>Priority:</th>
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<tr>
<td>B</td>
<td>02</td>
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</tbody>
</table>

To Support Annually: 20 Classes

Category: Over $200

Discipline Area: Biology

Description and part number for ordering:
Gooseneck Microscope Illuminators - Leica KL200 LED fiber optic light source With universal power supply with LED Adapter for stand, base plates and swan neck light guides.

<table>
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<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
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</thead>
<tbody>
<tr>
<td>24</td>
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</tbody>
</table>

Tax: $0.00

Shipping: Total: $18,840.00

One-time expenses: (e.g. construction, electrical, installation)
On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)

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. 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)

2. 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?
Observation under the dissection scope is an integral part of our Introduction to Biology Labs. Our current illuminators are over fifty years old and in varying states of disrepair. Quite a number are currently beyond repair.

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?
We are currently offering twenty sections of Bio 110L Intro to Biology Lab every year. This is the initial class that leads into most of our other biology courses, as well as serving as a general science class. It is important that we are able to upgrade essential equipment to continue to run these labs.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals? How will these outcomes be measured for future planning? What data or evidence supports your request?
SLOs as per the course outline require the ability to achieve good images under the dissection scope.

5. Additional Justification for this item:
Instructional Operating Supplies

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.

Importance:
• ’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?

<table>
<thead>
<tr>
<th>Importance:</th>
<th>Priority:</th>
<th>To Support Annually:</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>01</td>
<td>46 Classes</td>
<td>Biology</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Amount of Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>18491.0</td>
<td>16891.0</td>
<td>1600.0</td>
</tr>
</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. Is it necessary for students to succeed in a series of courses?

This increase in our supply budget is necessary to cover the inflationary increases in the costs of laboratory supplies as well as recent increases in shipping costs. These supplies are necessary to run our laboratory classes, including multiple sections of Human Physiology (Biol 224), Human Anatomy (Biol 120), Microbiology (Biol 240), Intro to Biology Lab (Biol 110L), all three of our biology majors sequence (Biol 112A, Biol 112B, Biol 112C), as well as other classes offered by our department.

2. 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 used in classes that collectively serve over 1,100 students per year. If we lose the ability to buy the necessary supplies to run our labs, our reputation for offering rigorous curriculum will suffer, as will our ability to teach to our course outlines and honor articulation agreements.

3. What student learning or other outcomes are expected? Is it important to the achievement of student goals? How will these outcomes be measured for future planning? What data or evidence supports your request?

Expected student learning outcomes will be those described in the corresponding course outlines for our laboratory classes. In order to teach laboratory classes and concepts as described in the course outlines, it is necessary to have the appropriate supplies.
Non-Instructional Support Staff

BIOL-2011

I. Current Support Staff
II. Request for additional support staff (clerical, lab tech, IS, comp tech, tutor, etc.)

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Type</th>
<th>Approx. hours per week</th>
<th>To support:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical</td>
<td>Part-Time</td>
<td>25</td>
<td>4000 Students</td>
</tr>
</tbody>
</table>

Justification: Please address the following areas as applicable. How will it be used? How will instruction be improved for student learning and success? How will access be improved? What student learning outcomes are expected? How will the outcomes be measured? What data or evidence is supplied to support your justification?

SCIENCE CENTER ADMINISTRATIVE ASSISTANT

Currently there is only a part-time administrative assistant for the three departments of Life and Earth Sciences, Physical Sciences and Mathematics. This is a total of eight disciplines and approximately 4,000 students per year. This is the only administrative assistant for the Austin Science Center, which has classes morning, afternoon and evening at least six days a week. This is also the only administrative assistant for the central office for this building, which also serves many students whose programs are housed elsewhere, as well as people new to the campus who are lost or otherwise need assistance.

This situation has produced several problems. First, it has been difficult to retain quality staff in this position, since part-time hours imply part-time salary. (The last two people who had this job left in order to get better hours and salaries elsewhere). Second, the job of serving so many students and faculty with so few hours is far more difficult than those of other administrative assistants on campus who have longer hours and fewer responsibilities. Third, lack of any administrative staff whatsoever in the building for many hours when classes are in session sends a strong message to students that they are ignored by the College.
Fortunately, many of these problems can be remedied with a simple solution. No new job category must be created. No new position must be filled. A strong step in the right direction would be merely to add the hours needed to bring up the existing position to full time, as it was for many years previously.

**Shared Resources:** If you have requested additional staff 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.

This position benefits three departments, Life and Earth Sciences, Physical Sciences and Engineering, and also occasionally students from other departments and programs.

<table>
<thead>
<tr>
<th>Purpose:</th>
<th>Type</th>
<th>Approx. hours per week:</th>
<th>To support:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Tech</td>
<td>Full-Time</td>
<td>40</td>
<td>1000 Students</td>
</tr>
</tbody>
</table>

**Justification:** Please address the following areas as applicable. How will it be used? How will instruction be improved for student learning and success? How will access be improved? What student learning outcomes are expected? How will the outcomes be measured? What data or evidence is supplied to support your justification?
MUSEUM LAB TECH

Last Year's PRAC Recommendation

From information our department has received, we understand that PRAC last year recommended filling this position for this next year (2012), since this is when the new building and museum are scheduled to open. Since this was based on documentation previously submitted, we have not repeated all of this information again. Rather, we have provided below excerpts from our requests, beginning with 2006 when the position originally became vacant, and continuing up to the present, to show that the need has not diminished in the past year. Indeed, with the opening of the new building, the need is expected to increase.

From Original 2006 Meeting with Vice-President Anita Martinez:

The Vice President urged the department to write immediately a description for a full-time museum lab tech since this was a key position, in service to students and in care for valuable college infrastructure, and especially in light of a forthcoming move to a new building.

From 2010 Program Review:

The biology/geology museum laboratory technician position has been vacant since May, 2006. Since that time, in a series of meetings among faculty and administrators, all have repeatedly agreed that it is unwise to leave this position vacant any longer.

At the end of the last Program Review, this position was given the highest priority, but apparently was not funded.

Since then, students have suffered reduced service, and the department has experienced two incipient fires, ten probable toxic chemical releases and continued deterioration of materials, resulting in a damaged learning environment and risks to health and safety.
Staff will be shared by two programs within the same department, biology and geology. Furthermore, although specific job capabilities must differ among the different laboratory technicians within our department, the fact is that all can have some basic knowledge of where equipment and supplies are kept, general departmental laboratory procedures, and common health and safety principles.

**Additional Museum Lab Tech Notes 2011**

Further problems have continued to result from the failure to fill the vacant museum lab tech position in a timely manner in 2011. Aside from the thefts, deterioration, health and safety issues and lack of service to students already reported in previous reviews, a few examples can be reported from this past year:

1. At least one more near-occurrence of fire, which fortunately resulted only in melted plastic.
2. Deterioration of specimens due to lack of ethanol replenishing
3. Continuing hazardous fumes due to lack of inspection of possible isopropyl alcohol and formalin leaks
4. Lack of updating of inventory as required by state and federal standards
5. Flagrant interruption of service to students.

In this last area, several student comments are worth noting:

"I made a special point of coming in early on Friday to do my assignment, but there was nobody present to unlock the door or turn on the lights. I had to turn around and go home again without getting anything accomplished. For a working student, this was a major inconvenience. I cannot believe that a school can pay so little attention to students."

"The apathy and disorganization on the part of the College of Marin staff in maintaining the museum was less than reassuring, to say the least. Assign a staff position to the museum!"

On the other hand, those students who were fortunate enough to be able to catch the museum open when things were set up were impressed:

"Wow! This week's museum observation definitely captured my interest. It was fascinating to dive into the world of parasites and learn about the many..."
different types and their life cycles and reproductive processes."

"Though lack of having a full-time staff member to adequately prepare the museum hindered what this project could become, it is not to any of the instructors' faults, as the fault rests on the higher-ups and their lack of insight into this project. Without any of these opportunities that were provided, I would have been lost in the educational system --- forced to drop the course out of frustration. Thank you for the opportunity that you have provided.... I found it essential to my learning process."

**Shared Resources:** If you have requested additional staff 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.

The new museum will the opportunity for collaborative work in all of the sciences at COM, if properly staffed and maintained. Thus this position will serve not only the disciplines in Life and Earth Sciences, but also the disciplines in Physical Sciences and Engineering. This could double the number of students served.

Access will be enhanced particularly for visually- and tactile- oriented learners, but will improve for all.
The position is essential for complying with health and safety regulations. Until it is filled, the health and safety risks will continue to increase. Up to now, we have relied mainly on luck to avoid major disasters, but relying on luck is not the best safety policy.