Technology Requests
Part II : Hardware for Lab and Classroom

COMP-2011

I. Technology Requests-Hardware for Lab and Classroom or other student use

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

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>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>01</td>
<td>80 Students</td>
<td>Computer</td>
<td>comp sci</td>
</tr>
</tbody>
</table>

Description and part number for ordering:
Computers for SC 101 and SC 133.

<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>$1,100.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$2,200.00</td>
</tr>
</tbody>
</table>

Type
College-wide
Discipline-Specific
None
None

If this is an upgrade or replacement, please briefly describe your existing equipment in terms of age and capability or lack thereof:

A number of courses are taught in both SC 101 and SC 133. Both have ridiculously old computers. Specifically for Computer Science a new computer with capabilities for running cutting edge software/programming routines in needed.

Item to be shared with the following Department/Program: (Include any shared expenses)
Life and Earth and Math also use computers in these classrooms.

Justification for Item (See Rating Rubric)
1. Is this hardware required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
2. Is this software required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)
We recently revised the computer science discipline bringing the educational material into the 21st century. We however do not have a smart classroom in the Science Center that can accommodate the more advanced needs for our programming courses. Recently there has been some talk of replacement of the computer in SC 133 after multiple requests by faculty, myself (department chair) and the dean. Hopefully this request will be moot because a new computer is already in the room.

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?

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

5. Additional Justification for this item:
Faculty Members

COMP-2011

I. Program Faculty

Additional Teaching Unit Requests

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.

The full time faculty who was teaching in this discipline can not or will not teach in the evenings. We have shown an evening program to be very successful and so the former FT faculty member now teaches in the Math department. Therefore as of now there is no full time faculty member.

When I was hired in 2004 the Computer Science discipline had been in steady decline for many years. By the time I became department chair 4 years later the program was almost non-existent. At that time enrollment for the whole year (fall and spring combined) varied between 35 and 50 with some terms having as little as 15 students for the entire program. There is probably no single factor for the cause of this decline in what should have been a robust program through the 90s and 2000s, but a few issues seem to emerge as most probable.

1) The courses were rarely updated. Some course outlines had not been updated since the early 80s. Of course many of these courses could not be submitted to update articulation agreements and so
began to be seen as worthless to our transfer students.

2) Courses were scheduled M-TH typically between 11AM-2PM. There was no attempt to schedule courses in conjunction with other subjects that students might be taking such as math, physics, engineering etc. Also there was no attempt to see if a night CS sequence would appeal to a broader audience of students.

3) Because the one full time instructor refused to make an honest attempt at updating the courses, the reputation of the program declined, courses often were cancelled for low enrollment and the cycle continued.

The situation got so absurd that I had witnessed, on more than one occasion, the instructor of record walking into an empty classroom at the assigned class time, sitting down for the required 80 minutes, and then leaving.

When elected as Academic Senate VP I help develop a new revitalization policy, not only because as an institution we were required to have one, but also with an eye to saving the computer science discipline. Once in place we carried out the following:

1) Did an analysis of more than 20 UC and CSU computer science programs and decided what were the top 8 to 9 courses we could offer that would allow greatest flexibility to our transfer students while at the
same time attracting
potential non-traditional students to the program.

2) Deleted more than 10 courses that were outdated or otherwise specialty courses that did not have a broad appeal to our students.

3) Rewrote all the remaining course outlines and added laboratory components to the core programming courses (yes programming used to be taught at CoM without the students ever sitting in front of a computer!).

4) Scheduled the entire program M-TH evenings. This served a number of purposes: transfer students could take their other science and math during the day, working community members could explore computer programming classes, and we were able to bring new part time instructors with ideas and energy into the department.

5) Rewrote the Computer Science AS degree which was subsequently approved by the Chancellor's office and is in the new catalog as of this semester.

Since launching the newly revised program our enrollment has steadily increased. We have gone from less than 23 students a year just before revitalization to more than 74 students this term alone and we are on course to serve nearly 120 in the new computer science program.

However, the program needs a full time
instructor. Because of an increase in TU for our core programming courses (upon the addition of a lab section for each) our current part time instructors can only teach one course at CoM. There is no continuity in the discipline and no one to take the fledgling revitalized program and develop it into the strong and robust program it should be.

It should also be pointed out that during the revitalization process I did, as department chair, request a new full time instructor be brought on board. Unfortunately because we were involved with the revitalization and I had to do program reviews for chemistry and help with physics, I never submitted a detailed program review for CS. When the 22 new positions were announced I asked about the requested CS full time position and was told that since it was not in the program review document we did not get one.

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.

We advertised for someone to teach the advanced C++ (COMP 235) for the spring semester for more than two months with only two unqualified applicants showing interest. Luckily the chair of the department at SRJC has decided to help us out by teaching the course. The newly revitalized program will not survive without a full time instructor taking over.

3. 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.

Zero

4. 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).

We almost lost the program or a variety of reasons. Over the past two years we were able to get some of the TU back through the revitalization process.

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

6. 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.

See above.

7. Current and 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.

With a FT instructor we can continue to build the program, add courses as student demand grows and make the discipline robust as it should be.

8. 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.

I can only compare to chemistry, where 3 full time instructors were hired in the past 10 years and the enrollment has gone up 114%. I can't say that that is the only factor, but breathing new life into a discipline from time to time can not hurt!

9. 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.

10. 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
COMP-2011

1. Please rank 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.

There is a major computer and printer request coming from Alice Dieli, et al that we strongly support. Also, putting in and regularly updating computers in all smart classrooms in the science building is essential.

2. Please comment if additional units, faculty, or staff have been requested.

Yes, we have requested a full time computer science instructor be hired immediately!

3. Other comments

Have a wonderful day!