To: Nick Chang, Jim Arnold
From: Patrick A. Kelly

Dear VP Chang and Dean Arnold:

I am writing in regards to the Computer Science (CS) discipline in the department of Physical Sciences at the College of Marin. I have informed the Academic Senate President that I would like to enter CS into a revitalization program and am 1) informing you of the department’s intent, and 2) requesting units for the fall semester as a first step in this revitalization.

As you are aware the CS program has been struggling for a number of years. This can be attributed to a number of factors including (but not limited to):

1) Course outline of records that were not updated for many years, with some classes losing articulation agreements and therefore not attractive to students (to my knowledge all of the courses I am proposing to offer over the next two years do have transfer agreements in place)
2) Course pathways that are difficult for students to follow in a timely manner. All one has to do is look in the college catalogue to see that there are a number of prerequisites that are required before a student may start taking transfer level classes. Many of the skills taught in these lower level classes may be able to be folded into the higher level classes.
3) Scheduling problems over the years, offering classes at times that were not appropriate for the population of potential students for the program.
4) Lack of consistency in offerings which inhibited students from moving through the program in a timely manner.

Revitalization:

During revitalization we will focus on two major areas, 1) going through each course outline looking for classes that are no longer useful, and updating prerequisites so students can move through the program with a minimum of duplication. This will entail discontinuing some courses as well as combining other courses that are redundant, 2) offering classes that will help feed students into the widest variety of engineering programs (see below), as well as a small offering of classes for the general population that want to enhance their computer programming skills.

With respect to class offerings, we have come up with two options, a three semester sequence and a four semester sequence, that will allow students to complete their CS requirements for a variety of engineering majors at the most likely transfer schools.
Bessie Ng-Jung has kindly put together a detailed assessment of the most important CS courses along with the schools and engineering majors these courses feed into. We will use this assessment to guide our offerings over the next two years. Her summary is as follows:

*CS 130: UCD: CompEngr, EE, CS majors;

*CS 140: UCSD: Bioengr, ME, SFSU: CE, ME; SLO: EnvEngr, ME

*CS 150AB: UCB: CE, IE, ME; UCD: CE, ChemEngr, CompEngr, Mat'l Engr, ME; UCSB: ChemEngr, CompEngr, CS, EE

*CS 160: UCD: CompEngr, EE, CS; UCSC: EE; UCSB: Bioengr, CompEngr, CS

*CS 220: UCB: EE, UCD: CompEngr, UCSD: CompEngr, CS, UCSC: CS


*CS 232: SLO: EE, SoftwareEngr; UCB: EE; UCSD: CompEngr, CS; UCSC: CE, CS, EE; UCSB: Bioengr, CompEngr, CS


Though we have 19 CS courses on the books you can see that by offering only 8 different courses we can serve a total of 80 engineering majors at 9 of our students top transfer schools. (We would also like to offer a beginning JAVA class, CS 135, as it seems to be popular with the general public as evidenced by this semester’s enrollment. A future possibility would be to combine 135 and 232, an advanced JAVA class, into one course but we would need to look at the transfer implications of this merger.)

In order to best serve the student population we think would be attracted to these courses we have decided to offer as many of them as possible at night. Below is the sequence of classes students would need to take.

Fall 1: 130, 140, 150  
Spring 1: 160, 220, 230  
Fall: 2 232, 235  
(160 and 220 could also be taken in Spring 2)

An alternate schedule could be:  
Fall 1: 130, 150
Spring 1: 140, 230
Fall 2: 232, 235
Spring 2: 160, 220

We realize that not all students will be able to take the many courses as outlined in the first year shown above. As long as students were counseled to take 130 and 150 in their first semester and 230 in their second semester they will satisfy the prerequisites for all the other courses and could have the freedom to take the others as the courses fit the student’s schedule.

With the above in mind we request being allocated units to offer 130, 140, 150A/B, 232, 235 for the coming fall (or the alternate which would move 140 to the spring).

One thing to be mindful of for this coming fall: since we have offered very few CS classes in the past year 232 and 235 may be VERY low enrolled. We would like to offer them, but are aware that they may not populate until the following fall.

We realize that this is a significant unit allocation for a program that has dismal enrollment numbers, but we think that our plan is the last, best chance for not only the computer science program but possibly the engineering program at the College of Marin. On behalf of the faculty in the Physical Science Department we hope you will strongly consider our request.

Sincerely,

Patrick A. Kelly
Chairperson, Physical Sciences.