

November 23, 2011

MEMO

To: John Morton, Ph.D.
Vice-President, UHCC

From: UHCC Science Faculty

Re: Petition for 1:1 Science Laboratory Teaching Equivalency

Dear Vice-President John Morton:

We, the UHCC fulltime science instructors, are petitioning for equal work hours with other disciplines. Currently, the teaching workload for science faculty is based on contact hours. We are required to teach two additional classes per year compared to our peer instructors in disciplines like mathematics and history.

There is no parity in that we are required to put in an average of 20% more classroom hours, office hours and class preparation time than our counterparts. All in all, this translates to at least 10 hours more per week than the other faculty.

	Math or History Faculty	Science Faculty	Percent Difference
Contact hours per year	27	32	19 %
Number of courses per year	9	11	22 %
Average number of courses per week	4.5	5.5	22 %
Average contact hours per week	13.5	16.5	22 %
Average office hours per week	4.5	5.5	22 %
Class preparation time per week	27	33	22 %
Total hours per week	45	55	22%

The UH administration thinks that science laboratory teaching is less intense than lecture teaching but this is incorrect. The truth is that teaching a science lab is even more labor and time-intensive than a lecture class. To wit:

The instructor is ACTIVELY teaching during the entire lab period the same way in the lecture class. The instructor lectures for 45-60 min before the

actual lab activity. During the actual lab, the instructor goes from student to student throughout the lab activity to ensure that the students are making correct measurements, properly manipulating the equipment, correctly calculating and interpreting the results, and, conducting the activity (i.e. calibration, dissection, culture, DNA/RNA extraction) correctly and safely. Lab exercises often require the instructor to teach outside of the immediate field (e.g., math, statistics, spreadsheets and writing fundamentals required for calculations and reports).

Lab classes require MORE preparation and planning than lecture classes. Instructional handouts, pre-lab assignment readings and quizzes have to be prepared for every meeting. Grading lab reports is harder and more time-consuming than grading lecture exams. Preparing a lab exam is more time-consuming than a lecture exam because there are no test-banks for lab exams. Each student report consists of up to 8 pages expression of individual procedures, evidences, calculations, discussion and error analysis. In addition, there is a significant amount of preparatory work done for the lab class that is not done for a lecture class. This includes setup, laying out of materials, supplies procurement, equipment maintenance, repair and inventory, taking down setup/materials, waste disposal, mandatory safety training, obtaining special permits, conducting a dry run, and equipment check-up. Even with a lab prep specialist in the department, the instructor must still plan for and often times assist with the additional work.

There are pre-lab quizzes, midterm exam and a final exam for a lab course. The instructor has a different set of SLO's to assess than the course lecture SLO's. The instructor has a different grading system for the lab, and submits a separate grade for the lab. It is a totally independent course, separate from the lecture, and on top of that, the instructor has to make connections with the lecture topic content. Only a few science courses are combined lecture and lab. A cursory look at the spreadsheet will show that majority of science labs are separate from the lecture.

We believe that any decision on teaching equivalency should be data driven and based on fact. We invite members of the committee to look at our lab course syllabi, lab reports, exams and visit our laboratory classes to get a sense of what we are talking about.

We, the undersigned, call on the Joint Teaching Equivalency Committee to increase the science lab teaching credit equivalency. This will benefit the UHCC system because the science instructors will regain their morale and can put time and energy into redesigning and improving the science lab

experiences. This will improve student learning, ensure the long-term success of our STEM programs and fulfill the UHCC system strategic plan.

Respectfully,



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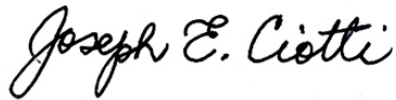
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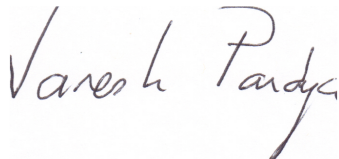
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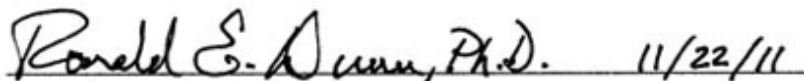
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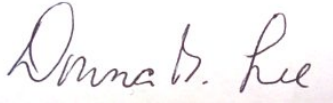
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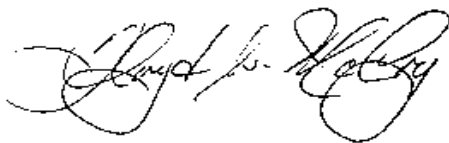
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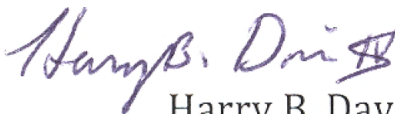
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