

## Course credit change for the advanced chemistry laboratory courses

Our advanced laboratories are CHEM 4111, 4223, 4311, 4511, and 4711 and these are all currently listed as 2 credit courses. After examining the total student time commitment in these courses, we determined that the number of credits was not well aligned with University policy in all cases and did not accurately reflect the relative time commitment between the courses.

### From the University policy statement:

1. Student workload expectations per undergraduate credit. The Faculty Senate affirms the standard (first adopted by the Senate on February 16, 1922) that, for fall and spring semester, one credit represents, for the average University undergraduate student, three hours of academic work per week (including lectures, laboratories, recitations, discussion groups, field work, study, and so on), averaged over the semester, in order to complete the work of the course to achieve an average grade. Thus, enrollment for 15 credits in a semester represents approximately 45 hours of work per week, on average, over the course of the semester.
2. Exceptions to undergraduate workload standard. Professional norms and the nature of the academic work may necessitate spending more than three hours of work per week on average. For example, clinical experiences, some laboratory work, and some studio activities may require more than an average three hours per week. Demands on the student in excess of the average of three hours per credit per week are permissible with college approval and with appropriate notification to the student of the amount of work expected for the course or educational experience (e.g., in class schedules, bulletins, or syllabi).
3. Student workload statement required for undergraduate courses. All proposals for undergraduate courses must include a student workload statement demonstrating how the course conforms to the student workload expectations in sections (a) and (b). College and campus curriculum committees and other approving bodies (e.g., the Council on Liberal Education) must consider the student workload statement in reaching a decision on whether to approve a proposed course.

### Time commitment summary

The following shows the time commitment in the advanced labs per week. The hours outside class are the averaged values reported on the student evaluation forms over the last three years, and values were rounded to the nearest half hour.

course	lecture	lab	outside	total	current	Univ. policy	proposed
CHEM 4111	1	4	4.5	9.5	2 cr	3.2 cr	2 cr (no change)
CHEM 4223	1	4	5.5	10.5	2 cr	3.5 cr	2 cr (no change)
CHEM 4311	1	9	6.5	16.5	2 cr	5.5 cr	4 cr
CHEM 4511	1	3.5	9.5	14	2 cr	4.7 cr	3 cr
CHEM 4711	1	6	6.5	13.5	2 cr	4.5 cr	3 cr

Our proposal for credit assignment includes the fact that these are laboratory courses, and therefore fall under point 2 of the policy above recognizing additional time requirements that may be associated with laboratories. Consideration was also given to the fact that 100% of the scheduled laboratory hours are not generally used by all students, and this differential is not the same in all courses.

**Re-word degree requirements for CSE**

For the CSE degree the advanced laboratory requirement is currently defined in terms of credits. Given that all advanced labs are 2 cr each, the current requirement of 6 cr of advanced lab is intended to reflect three advanced lab courses. With a change in the credits for the courses, we would change the requirement to read as follows:

The advanced chemistry laboratories are CHEM 4111, 4311, 4511, 4711, and 4223.

CSE students are required to take three advanced laboratory courses. Students may use CHEM 4094 or one of the laboratories listed below (\*) in place of one lab.

\*CHEN 4401, CHEN 4402, BIOC 4025, MEDT 4311, MEDT 4321, PHYS 2605

**Will there be a change in total credits required to obtain the degree?**

Technically, there will not be a change in the credits required to get the chemistry degree since a student can still select 4111, 4223, and 4094 as three advanced laboratories, and these are still 2 cr each. However, it should be noted that since a finite number of our majors will not choose these options, there will be a small increase in the average number of total credits.