

## **Motion Six (a-d) from UCC: Changes to Organic Chemistry**

**Background information and overall rationale:** There are two issues here that need to be separated. The first is dividing the courses into separate lecture and lab components instead of offering them as a tied unit. This is largely a record-keeping question as the course, the experience, the tangibles, will be unchanged. This will simply make it easier for the registrar to enroll students who have already had and passed one piece of the course elsewhere. For example, as it currently stands a student who passed the lab at UMSL would need to enroll in an independent-study section of the Fontbonne course that did not include the lab and was therefore 3 credits instead of 4. This becomes confusing to the students and to anyone who would need to evaluate the transcript. It also does not reflect reality, in that the student is not taking the course as an independent study, she is sitting in the classroom with the others, but there is currently no way to enroll her for just the lecture. Separating them in the system will address this problem. This is not as big a problem for our other lab courses, but we have a few students every year who need only one component of the Organic Chem. course. There is no budgetary consideration associated with this request.

The second issue is that the Biological and Physical Sciences Department would like to increase the credit given for both of the Organic Chem labs (Chm 211 and 213 if the first issue is passed). In our lab structure a lab lasts for 2 clock hours every week but is only credited as 1 credit for the student. This is the case for all of our labs, including the Organic Chem labs, but those labs have always been 4 clock-hour labs. This is standard, as before you can begin most activities associated with Organic Chemistry there will be a lengthy process of building the apparatus. Usually this is a distillation set up, which has to be connected to the cold-water faucets of the sinks and cannot be left “up” from week to week because of space constraints. For teaching credit previous instructors have submitted Organic as a double lab. So the cost to the department for instruction would not change. The only change would be in terms of cost to the student for the extra credit (two credits if they take both semesters of Organic Chemistry). The benefit for the student is in the fact that the number of credits she is enrolled in reflects the amount of time spent. This could help students who might otherwise overload their schedules in a semester that would be best left lighter. For the curriculum sheets, the Organic course is taken in a 16 credit semester, so increasing the credit by 1 would not burden the student financially. For other students that may not be true, but it is a rare non-science student who wants to take Organic Chemistry. Also, just FYI, the Organic Chemistry that the dietetics majors take is a different, 1-semester course. It also has a 4-hour lab, but the faculty in that department did not want any increase in credit so we are not pursuing it. This will only affect students seeking the bio degree or the chemistry minor.

**(a) It is moved that** the lab and lecture components of Organic Chemistry I be separated.

**Rationale:** This is done at many other schools, thus transfer students will often have one portion of the course that they can transfer with a passing grade, and one portion that they must repeat. This becomes problematic in terms of registering the student for of only part of the course. The numbers for the separate sections are in the system, as it has been done this way in the past. The credit hours will go from 4 to 3 for Chm 210.

**(b) It is moved that...** the course Organic II Lab be added to the catalog of offerings.

**Rationale:** Previously the lab portion of Organic Chemistry I was included in the course **CHM 210 Organic Chemistry I with lab**. This course is often offered in two separate sections and this presents problems if students take and pass a separate lecture or lab at another university. Separating the lab to a stand-alone course will make it easier for transfer students. Also, the lab has always been given a 1.0 credit value, but in reality it is a 4 hour lab and at most other schools gets a value of 2 credits. We propose that change as well.

**The current entry:**

**CHM 210 Organic Chemistry I with Lab (4 credits)**

A study of the compounds of carbon with emphasis on functional groups, structure nomenclature, and reactions.

Prerequisites: CHM 106; CHM 108. FA

**Would change to:**

**CHM 210 Organic Chemistry I (3 credits)**

A study of the compounds of carbon with emphasis on functional groups, structure nomenclature, and reactions.

Prerequisites: CHM 106; CHM 108. FA

**CHM 211 Organic Chemistry I Lab (2 credits)**

Laboratory experience to accompany CHM 210. Must be taken concurrently with CHM 210 or by consent of the department chair. Prerequisites: CHM 106; CHM 108. FA

**(c) It is moved that** the lab and lecture components of Organic Chemistry II be separated.

**Rationale:** This is done at many other schools, thus transfer students will often have one portion of the course that they can transfer with a passing grade, and one portion that they must repeat. This becomes problematic in terms of registering the student for only part of the course. The numbers for the separate sections are in the system, as it has been done this way in the past. The credit hours will go from 4 to 3 for Chm 212.

**(d) It is moved that** the course CHM 213: Organic II Lab be added to the catalog of offerings.

**Rationale:** Previously the lab portion of organic II was included in the course Chm 212 Organic Chemistry II with lab. This presents problems if students take and pass a separate lecture or lab at another university. Separating the lab to a stand-alone course will make it easier for transfer students. Also, the lab has always been given a 1.0 credit value, but in reality it is a 4 hour lab and at most places get a value of 2 credits. We propose that change as well.

**The current entry:**

**CHM 212 Organic Chemistry II with Lab (4 credits)**

A study of the mechanisms of reactions of organic compounds.

Prerequisite: CHM 210. SP

**Would change to:**

**CHM 212 Organic Chemistry II (3 credits)**

A study of the mechanisms of reactions of organic compounds.

Prerequisite: CHM 210. SP

**CHM 213 Organic Chemistry II Lab (2 credits)**

Laboratory experience to accompany CHM 212. Must be taken concurrently with CHM 212 or by consent of the department chair. Prerequisites: CHM210. SP

**Proposed Date of Implementation:** Fall, 2012