

## Report of the 100/200-Level Transfer Sub-Committee

We examined how course transfer among the MUS institutions might be improved. We took a hard look at 100 level chemistry courses across the MUS system and the three private colleges. Chemistry was the focus because this is a relatively mature discipline whose undergraduate curriculum has been strongly influenced and standardized by the American Chemical Society. Chemistry offered a high probability of suggesting a system of transfer articulation that might be used as a model for all 100 and 200 level courses and eventually all courses in all disciplines.

### Disciplinary Case Study: Chemistry

What we found was complex.

- Among the 21 MUS institutions and 3 private colleges there are 92+ 100 level chemistry courses that sort into 22 distinct courses falling into 3 broad categories; Introductory Chemistry, Introductory Organic and Bioorganic Chemistry, and General Chemistry.
- The primary barrier to smooth transfer among these courses results from ~ 55% of the lecture courses having a laboratory experience embedded in the course versus lecture courses with no laboratory component. For example, a student who has taken at Montana Tech CHEM 1056, a 3 credit General Chemistry course with no embedded laboratory, and plans to transfer to the University of Montana – Missoula will have difficulty. Since the equivalent course at the UM-Missoula is CHEM 161N, a 5 credit General Chemistry course with a 1 credit embedded laboratory, the Montana Tech course can't transfer simply. To give the student credit for CHEM 161N at UM-Missoula would be to imply that the student had a laboratory experience that they did not have. If the Montana Tech student had also taken at Montana Tech CHEM 1136, a 1 credit General Chemistry laboratory course, then the pair of Montana Tech courses, CHEM 1056 and CHEM 1136, could transfer for 4 credits of UM-Missoula's CHEM 161N. We found this situation common among 100 level chemistry courses and suspect that it is prevalent among all MUS courses that have associated laboratories, i.e., all science courses.

The sub-committee's examination of 100 level chemistry courses suggested that there are no simple solutions, e.g., common course numbering, with respect to simplifying transfer. Transfer even among very stable disciplines can be quite course specific. The sub-committee did think, however, that **an accessible, up-to-date electronic transferability information system would be of value to the students and would go a long way toward solving much of the "transfer problem"**. Several partial systems currently exist, primarily among the MSU institutions. These systems suffer from being institution specific and often out of date.

### An Alternative Model for Transfer Evaluation

What the sub-committee has in mind is probably best described by means of an example. A student at Montana Tech who was contemplating transfer to the UM-Missoula and who was wondering how CHEM 1056, which he had taken and passed at Montana Tech, would transfer to UM-Missoula, would access a web page that would ask for the institution from which he/she was transferring and the receiving institution to which he/she was transferring:

**Transferring Institution**

Montana Tech
--------------

**Receiving Institution**

UM-Missoula
-------------

Submitting this information would return a long list of matched courses that would transfer from Montana Tech to UM-Missoula:

**Montana Tech****UM-Missoula**

•	•	
•	•	
•	•	
CHEM 1016	CHEM 151N	
CHEM 1026	CHEM 152N	
CHEM 1106	CHEM 154N	Note
CHEM 1056		Note
CHEM 1066		Note
CHEM 1136		Note
CHEM 1166		Note
CHEM 1226C		Note
CHEM 1256H		Note
CHEM 1266H		Note
•	•	
•	•	
•	•	

The initial feedback to the student is that Montana Tech's CHEM 1056 does not transfer. Clicking on the Note, however, reveals the following additional information:

Montana Tech's CHEM 1056 and CHEM 1136 will transfer for 4 credits of UM-Missoula's CHEM 161N.
--

Desirable characteristics of this transferability information system would include the following:

- The system should be easily accessible, i.e., a student should be able to link to it from the web sites of any of the campuses and from the OCHE web site.
- The system should be consistent, current, and provide reliable information.
- Because curricula are constantly evolving, the registrar's at the individual campuses should be able to electronically up-date the system in real time.

Developing and maintaining this system would require:

- A full or partial position in the OCHE that has overall responsibility for the system.

- Hiring a programmer to initially develop the software to make the system work. Since MUS campuses that use BANNER keep their curricular information in BANNER current, the sub-committee recommends that the software be developed to pull the required information directly from BANNER at the various institutions. This software would require the ability to associate course “Notes” that are specific to particular pairs of institutions, as illustrated in the above example. Utilizing BANNER would have the additional desired effect of providing for real time updating of the system by the registrar’s of the participating MUS institutions. This recommendation has the drawback that only campuses running BANNER would have the most current information in the system. These are the larger campuses representing the majority of the students in the MUS. Campuses not using BANNER could still be a part of the system, but their curricula would reside in a static database, that would only be updated sporadically.
- Building an initial trial database of transferable courses, using primarily existing transfer guidelines and agreements. The OCHE position would coordinate the development of this trial database.
- Establishing and convening representative disciplinary committees. Initially these committees would have representation only from institutions using BANNER. The OCHE position would coordinate this activity.

Working with the trial database, these disciplinary committees would:

- Identify, within the discipline, broad categories of equivalent courses.
- Define core competencies within these broad categories of equivalent courses.
- Identify courses from these institutions that met these core competencies as transferable courses. These last two points would have the desired effect of providing some low level of standardization to what is being taught in essentially equivalent transferable courses across the MUS system.
- Ultimately and where possible, assign a common transfer number to transferable courses within these broad categories.

### **Resource Implications**

This proposal would require some not inconsequential allocation of MUS resources. Individual time and effort would be heavily concentrated in the initial phases of developing this system, which we would estimate at approximately three years. Once a robust database has been established and registrars are able to update the system easily in real time, the system should require only minor maintenance. Disciplinary committees may occasionally need to be convened to sort out particularly thorny curricular issues.

Doug Coe, Chair 100/200-Level Transfer Sub-Committee

February 10th, 2003