## **Working Toward a Statewide Transfer Agreement for Geology in Colorado**

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Preparing students for transfer to bachelor's degree programs in geology and related disciplines is one of my primary goals as discipline lead and the only full-time geology faculty member at Red Rocks Community College (RRCC). To that end, I have become heavily involved in curriculum development and revision at the state level in order to strengthen our courses, and have worked with faculty from other institutions to determine course requirements for an AS in Geology degree. I will focus on the latter efforts for this essay.

For the past 3 years, I have been the State Discipline Chair for Geology for the Colorado Community College System (CCCS), which includes 13 colleges and is the state's largest system of higher education. One of the things our group has worked on is reaching consensus on recommended coursework for an AS in Geology. However, the requirements for any specific major have been at the discretion of each institution, and degree transcripts have not designated majors, so the usefulness of this endeavor is debatable. That is changing.

A few years ago, state legislation resulted in the Colorado Commission on Higher Education (CCHE) being required to approve subject-specific statewide transfer articulation agreements. A few disciplines each year have met to work on these agreements, and 12 are already in-place with more in the works. This April, it was geology's turn. Representatives from 2-year and 4-year programs in geology met and were tasked to come up with a curriculum plan for 60 credits of coursework that will: meet CCCS requirements for an AS degree with designation; transfer to a 4-year program in that subject at a public school; put the transfer student at junior status if admitted; and allow the student to graduate with a BS degree with 60 credits or less of additional coursework (i.e. for a total of 120 credits).

I was the Chair of the meeting, and was pleased with how well our group worked together. We came to a fairly quick agreement about what coursework would be necessary to fulfill the above directives. The draft curriculum plan set the following requirements: 21 credits required by the system for Arts & Humanities, History, Social & Behavioral Sciences; Physical and Historical Geology; Calculus I and II; General College Chemistry I and II; Calculus-Based Physics I; and 6 credits of electives, for which we also included a recommendation to take Calculus-Based Physics II. This plan will next be reviewed by faculty and administrators at each public institution in the state before obtaining final approval.

On the downside, the fact that this curriculum plan includes only 2 geology courses and leaves little room for electives might mean that majors will be less-likely to take some of the many other courses we offer in our program. Also, one disadvantage of a blanket statewide transfer agreement as compared to agreements with individual universities is that the requirements for a bachelor's degree in geology vary a lot from school to school. It would have been nice to allow for more electives or include additional geology course requirements for the AS, and with most of the 4-year programs that would have worked. However, leaving out any of the courses we included would have made completion in 60 more hours impossible at a couple of schools that had a greater number of specific course and sequencing requirements.

The major benefits of having a statewide agreement in place are that it will help to insure that our majors are prepared for their 4-year degree and put our graduates on stronger footing at their transfer institution. It will also remove a lot of the uncertainty about what courses to take for both students and advisors, who have limited knowledge about geology BS degree requirements. It might also increase enrollment for some courses. For example, RRCC has more students transferring to the Colorado School of Mines (CSM) than any other school, and has had a transfer agreement with them for many years. Most of their programs either require or recommend Physical Geology, which certainly boosts numbers in that course. On the other hand, Historical Geology is not on that agreement (to my frustration), which has so far kept our enrollment in that course lower and made it necessary for each student who takes the course here to appeal for it to count for the equivalent course if they go to CSM (the credits are guaranteed to transfer, but not for a particular course).

Regardless of some of the potential issues, the advantages of a statewide transfer agreement are clear and I am looking forward to having it in place.