Working Towards a Geoscience Degree

Ivy Tech Community College, Indiana's only 2-year college, is still transitioning from a technical college to an all-encompassing fully accredited community college. Within the science department we have 4 full-time faculty members who cover the basic science disciplines (biology, chemistry, physics, and earth science) through introductory laboratory classes. Currently, Ivy Tech offers only 100-level science courses and does not offer a specific associate's degree in any science discipline (science is housed within general studies). Also, Ivy Tech does not offer a true geology course, but offers the broader earth science course as one of the science elective options available to students. However, Ivy Tech is rapidly expanding and the science program is at the forefront of course development. One of several goals I hope to achieve by attending this conference is to network with other two-year geoscience faculty members to determine what other classes are being offered, geoscience program objectives, and what improvements can be made to better serve future science and geoscience majors.

Earth Science is an introductory laboratory-based course offered at Ivy Tech. Within that course we cover a wide-range of topics including physical geology, historical geology, oceanography, and meteorology. The objectives of the course are pre-determined by our central office; however, I have attempted to incorporate place-based inquiry, hands-on experiences, community partnerships, and literature review into my curriculum to improve the geoscience experience of my students. Ivy Tech Community College is located in the urban center of Indianapolis, so many of my classroom discussions and laboratory activities center around urban living (such as soil and groundwater contamination), providing students with a place-based connection to earth science. Students learn about community issues (such as drought conditions within the local watershed) that have direct applicability to their own lives. I incorporate resources from the local professional organizations (such as the US Geological Survey – Indiana Water Science Center) and hope to collaborate with them on future projects. Students are also required to complete bi-semester literature reviews of current professional geoscience research.

Ivy Tech currently has two exciting geoscience initiatives in development. First, Ivy Tech recently started an honor's college, of which, earth science will be the first science course offered within their rigorous curriculum. As developer, I hope to incorporate semester-long geoscience research projects, data collection, and field trips into our earth science honor's curriculum. Ivy Tech's second initiative is to develop an entirely field-based earth science course where students spend the summer semester traveling across the American west experiencing earth science first-hand. I am eager to learn about and discuss other college's attempts to improve geoscience education and geoscience career preparation during this workshop.

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