Student Learning Outcomes Assessment Summary

BS (Geological Engineering)

College of Engineering and Mines

2014-2015, 2015-2016

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1. Assessment information collected:

- Course assessment based on faculty self-evaluation, performance indicators for each for ABET outcomes and pre- and post-course surveys for assigned set of ABET outcomes;
- Peer review by students in class;
- Exit interviews;
- Review by Departmental Advisory Board
- Reviews of alumni and employer surveys;
- FE exam results;
- Student presentations in professional meetings such as the Association of Environmental and Engineering Geologists and the American Institute of Professional Geologists Annual Meetings.
- Preparation of ABET Visit Report for 2017.

2. Conclusions drawn from the information summarized above:

- Each of the Geological Engineering faculty is tasked to make certain that the contents of his/her courses are consistent with the ABET program outcomes. The following summarizes the conclusions drawn by faculty as a group from the assessment results:
    - Continuous improvement of courses and laboratory facilities need to 1accommplished.

3. Curricular changes resulting from conclusions drawn above:

- The following curricular changes have been implemented during this assessment period:
    - Replacement of GEOS 332 Ore Deposits and Structure with GEOS 314 Structural Geology to ensure adequate background geological structures;
    - Replacement of ES 201 Computer Techniques with ES 346 Basic Thermodynamics.
- The following curricular changes under consideration by the faculty to ensure continuous improvement of the program's educational objectives:

- Replacement of MIN 225 Quantitative Methods in Mining Engineering with STAT 300 Statistics.
- Substitution of GEOS 320 Sedimentology for Geological Engineers with GEOS 322 Stratigraphy and Sedimentation.

4. Identify the faculty members involved in reaching the conclusions drawn above and agreeing upon the curricular changes resulting:

All Geological Engineering faculty members were involved in reaching the above decisions, conclusions, and actions resulting in the changes to the curriculum and are listed as follows:

- Professor Margaret M. Darrow
- Professor Scott L. Huang
- Professor Paul A. Metz
- Professor Debasmita Misra