Student Learning Outcomes Assessment Summary

Computer Engineering, B.S.

College of Engineering and Mines

AY 2014-15 and 2015-16

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1. Assessment information collected

During these two academic years, we collected data using 3 direct assessment mechanisms and 1 indirect method.

1) All 11 ABET a-k outcomes were assessed by the faculty teaching the senior capstone design projects on a 1-5 scale. The results are shown for 5 students in this 2 year period.
a=3.95, b=4.10, c=4.15, d=4.05, e=3.90, f=4.15, g=4.25, h=4.15, i=4.30, j=4.25, k=4.30
None of the values fell below the 3.0 threshold.

2) ABET outcomes c, d, f, g, h, i, and j were assessed in 2014-15 by faculty in their FPAR (Faculty Performance Indicator Assessment Reports). Results are given in terms of the percentage of students (out of 2) that exceeded the performance threshold in each of the outcomes.
c = 100%, d = 100%, f = 100%, g = 100%, h = 100%, i = 100%, j = 100%
Each of the outcomes is above the threshold value of 75%

3) The nationally normed FE exam was taken by graduating seniors. The results of the FE exam over the last 2 years are 100% of 3 UAF CpE students passed compared to the national average of 76%.

4) All 11 ABET a-k outcomes were indirectly assessed by the seniors in a senior exit survey. The results (in a 1-5 scale) are shown for 5 students in this two year period.
a=4.40. b=4.00, c=4.00, d=4.40, e=4.00, f=4.20, g=4.40, h=3.40, i=3.80, j=3.20, k=3.80
Assessed value for each of the a-k outcomes is above the 3.0 threshold.

2. Conclusions drawn from the information summarized above

None of the assessments (FPAR) of outcomes were below the threshold. Because the sample was small, we will continue to monitor student performance and reevaluate the results after the next assessment cycle.

For the senior exit survey, an indirect assessment method, all the outcomes were above our 3.0 threshold, including the outcome j – a knowledge of contemporary issues, which was under the threshold last time it was assessed.

3. Curricular changes resulting from conclusions drawn above

Because the outcome j still has the lowest score on the senior exit survey, we will continue to emphasize that most of the issues introduced in our classes are contemporary issues. For example, for the past two years, students in the senior capstone design course were working on projects related to NASA's future space missions, defined and mentored by NASA scientists.

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

The entire ECE department faculty, except for Professor Bogosyan who is on leave of absence, reached the above conclusions and resulting no-curricular changes. The ECE faculty includes:

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