



**Engineering Technology Advisory
Committee Minutes
October 17, 2017**

PRESENT: Chad Cowley, Tyler Paul, Kevin Martin, Cleary Johs, Tim Langerud,

ABSENT: Jayme Engen, Tyler Wollmuth, Jasper Klein, Jennifer Malloy

INSTRUCTORS PRESENT: David Sagsveen, Aaron Hummert (adjunct surveying)

Meeting began around noon

Discussion started with agenda item of introduction of new members. Dave indicated that Jennifer Malloy (absent) would be the newest member of the committee. Jennifer is an engineer at Apex Engineering; she will be replacing Scott Olson on the committee. Dave also indicated that he was trying to secure a new member from KLJ, but that the person initially contacted had declined. Dave will search for another KLJ representative.

Discussion continued with a review of the ABET status. Dave indicated that in the latest review following the interim report submitted this year that we had an issue with the Respect for Diversity element. Following discussions with our team chair, our competency for Respect for Diversity was updated and a new approach to assessing that will be implemented this year. A follow up report (by Dave) will be due to ABET by the end of June, 2018 showing these improvements. ABET will vote on our status during the 2018 summer meetings and we are hoping for a full cycle (6 years), or at least the remainder of a full cycle (4 years) at that meeting.

Discussion continued regarding Dave's meetings this summer with the state board of registration regarding experience requirements for BSC graduates vs graduates from other 2 year schools. Out of the meetings came the conclusion that ABET was important in their eyes (they looked at the importance of the Gen Ed courses in the curriculum required for ABET) and that our graduates would not require an additional year of experience.

Discussion continued regarding CT 228: Boundary and Cadastral Surveying course. Dave introduced the course instructor, Aaron Hummert. Aaron works at Interstate Engineering in Mandan. Aaron briefly described how the course is going and topics. Dave and Aaron discussed change planned for next year where CT 228 would be taught in the spring semester (4th semester of the curriculum) instead of the fall (3rd semester of the curriculum). Both Dave and Aaron thought this would be most beneficial to the students since they would be more familiar with terminology and concepts in the spring following completion of Surveying I in the fall. Dave also indicated that there will be adjustments to the Surveying II course beginning this spring because of the shift of boundary and PLSS topics to Aaron's course. Dave indicated that he had received an email from Cleary this summer regarding input he (Cleary) had received from his employees who are graduates from the

program. Those individuals had suggested a few items that they would like to see; some of those would be incorporated into Surveying II lecture and lab

Follow-Up: Here is a list of items they suggested

- *More use of total stations and data collectors*
- *LSI exam review/study help*
- *More Excel*

These will be perfect for addition to Surveying I since we have freed up time in the course. They also suggested:

- *Another GIS course: This has already been implemented (GIS 107 beginning with this year's students)*
- *More construction/project manager based classes: We're hoping to strengthen the existing CT 252 course per previous discussions (Chad Cowley's comments, Spring, 2017).*

Discussion continued regarding current outreach initiatives. Dave showed the Augmented Reality sandbox built during the summer for the GIS and Engineering Tech programs. The sandbox is similar to other sandboxes around the world using a concept developed by UC Davis. BSC's sandbox was designed to be very mobile friendly, and Dave (and Angie from GIS) are hoping to use it extensively. Dave indicated that he would like to try and secure funds for an enclosed trailer to be able to move the sandbox and other Engineering Tech / GIS items for outreach events. A request for funding letter will be sent out to firms and organizations this fall requesting donations for a trailer. Dave indicated that the sandbox has so far generated more interest in the Engineering Tech and GIS programs than any other event or marketing effort we've ever done at BSC.

Meeting concluded around 1 p.m.

Submitted by,
David Sagsveen

Thank you for your continued support of the Engineering Technology Program. If there appears to be any errors or missing items in the minutes, please contact David Sagsveen at 224-5443 or David.Sagsveen@bismarckstate.edu.