Industrial Advisory Board Meeting
 September 8th, 2016

Participants: Mr. Chad Easterling (Dynetics), Dr. Kelley Burgeron (MITRE), Mr. Toby Rimes (Mentor Graphics), Dr. Adam Wade Lewis, Prof. Dave Fitzsimmons, Prof. Katia Mayfield, Mr. Daniel Caywood (student), Ms. Liza Cominotto (student), Dr. Joe DeLap (Vice President for Academic Affairs & Provost), Dr. Sara Cline (Biology Professor)

The meeting for the Fall semester we started off with quick introductions as some of the new members had not had the chance to meet everyone and vice versa. We also had Dr. DeLap and Dr. Cline join our Fall meeting as special guests.

Dr. DeLap started the meeting with a few words to our board and provided the official ABET decision of our accreditation process.

Dr. Cline followed in discussions of the proposed Bioinformatics degree option that she was in the process of submitting for approval. The course selection that was made for the degree covers the fundamentals that allows for students to move into a Master's degree program. Student will be able to collaborate with Hudson Alpha and do one month of research with them. Mr. Easterling inquired about the difference in the courses that are CS related in the Bioinformatics degree and a minor in Computer Science. The courses required for a Bioinformatics student is essentially a CS minor with an additional two course requirement. Dr. Cline currently has 3 to 5 students that are interested in this degree. There is encouragement to have students be exposed to research, currently Wallace State has a club for students that are interested that allows them to do that, and Dr. Cline plans to determine the options that may be available to Athens State to be able to do the same.

Dr. Lewis led the meeting by discussing the official response document that was sent to ABET. In our previous meeting we had the "unofficial" comments from the visiting team, during this meeting those comments were reviewed allowed with the actions that the department has taken to address each of them.

ABET accredited the Computer Science option of the Bachelors of Science in Computer Science. There was the concern that the Information Security option was not accredited but this is speculated to have been due to the fact of how the word "option" is recognized by ABET. The current transcripts that students receive do not currently state that their Major is Computer Science with the option of Information Security. Based on feedback from ABET we believe that this may have hindered the accreditation process for that option. Dr. Lewis and Prof. Mayfield have discussed this issue with Dr. DeLap and academic services and changes are being made to have transcripts read that the major is Computer Science and the option (or concentration) is

Information Security. By doing this the department is confident that when we have our re-accreditation visit in Fall 2017 that the Information Security option will also be included in being approved.

With the program split taking place in Fall 2017, the department is also starting to prepare to seek accreditation for the Bachelors of Science in Information Technology.

Professor Mayfield also went over the results of the Annual Assessment Report for 2015-2016 and discussed the changes that were made to the Annual Assessment Plan for 2016-2017. Based on the last board meeting there were changes made where the board agreed that some of the direct measurement changes made were good to be able to provide more accurate analysis of student performance.

At the Spring meeting conversation was started with the Board about how to get students to further engage in the Exit Exam that they are required to take during the Capstone course. At that time the exam was only a requirement, however the Board suggested that more stakes should be present and that the department should adopt the concept used by the Math department, where students must pass the exam with a 70% or higher. In the case that a student does not pass the exam, then they will be required to take the exam again.

The Computer Science department did start the implementation of a minimum grade of 70% on the exit exam for students to be awarded approval of that requirement for graduation. At the moment the department the department is only prepared for this. Discussions in the scenario that a student does not pass the exam a second time have not been finalized. ***One thought is to require a student to take and pass an additional course, however this is not currently present in the catalog and therefore may not be able to be enforced.*** The department plans to research what will need to be done to require the additional course if a student does not pass the exam a second time.

Comments from the board were in regards to the results of the exam and the format. Based on these discussions, the department plans to re-evaluate the weight of each section of the exam as it is currently even across all sections, even though some sections contain a significant amount of questions compared to others. The second area of concern voiced by the Board members is that some of the questions on the exit exam are multiple choices. Reason for this concern is the fact that when students are asked their technical interview questions they are not provided multiple choices and must be able to evolve the solution on their own.

In addition to the assessment taken by the Exit Exam, Professor Mayfield is working on finding consistent ways that the department is able to assess courses and the department as a whole.

New equipment has been purchased to assist the faculty in being able to do this, and meet the requirements of all the documentation that is required by ABET.

After the discussions of the assessment, we discussed the projects being conducted in the capstone course. For the current semester there are three:
1. Implementation of a website for the NUCOR Relay for Life team. This idea was brought forth by Mr. Wesley Marsh who serves on the Board.
2. (Research) Power Aware Computing Utilizing Thermal Models to Develop Efficient Scheduling Algorithms.

Capstone presentations will be on December 5, 2016 at 6:00pm if anyone is interested in attending. A location will be sent out in the future.

Spring 2017 (Tentative)
1. Re-design and enhancements to Sand Mountain Katahdins (sheep) website.
2. Re-design and enhancements to New Beginnings and Trading Post website
3. Enhancements to the Limestone Sherriff's Rodeo website.
4. Continued work on the Molecular Biology themed Serious Educational Game for the iPad.

During capstone discussions we reviewed parts of a Capstone Liabilities Statement that the department is developing. In the beginning we were only working with non-profits but now that we have expanded our "collaboration pool" we are taking actions to be sure that everyone's interests are kept safe from legal issues.

The department also had a special employer session held by Dynetics. This was a successful session with many students asking about internships and co-ops. Through Career Services, Quantum Research and the Missile Defense Agency were also going to be holding student presentation. We welcome presentations and are more than willing to assist in getting a session established and announced to our students.

Dr. Lewis went over a Program SWOT analysis, discussing our strengths, weaknesses, opportunities, and threats. One of the issues that we would like to work out is something with the Junior Colleges to see if there is a General Education minor that students can enroll in to be sure that they transfer in to Athens State with the required courses for their general education requirements of the degree.

We also went over our goals for the upcoming three years which included the re-evaluation for the CS accreditation in Fall 2017 and plans for us to pursue the IT accreditation. The department is also collaborating with the College of Business to try and become a National Center for Academic Excellence in Cyber Defense. Lastly we are reviewing the curriculum for the IT

program. At the moment it requires for students to declare a minor. Evaluation being done to determine if we will be requiring minors vs. concentrations vs. options. At the moment prospective areas of study are databases and data analytics, industrial automation and robotics, and computer graphics and gaming. Mr. Easterling and Dr. Kelley both mentioned the need for modeling and simulation.

Lastly, based on one of the ABET accreditation presentations that Prof. Mayfield attended, ABET encourages departments to recognize their Boards if one is formed. Therefore, the department would like to move forward with the idea of establishing a website that will contain information introducing the Program Advisory Board and what we do, pretty much the information that was covered in the initial invitation email that you received. We would also like to be able to recognize the individuals that serve on the board by providing a short biography with picture, and allow for our meetings summaries to be made public by being posted on the site. This of course can only be done with approval and agreement from the Board members. This seemed to have been agreed upon during the meeting. A future email will be sent requesting a short biography and picture from Board members to create the website.

Meeting was closed with plans for the next one which will be tentatively held in February 2017.