PI TAU SIGMA ANNUAL CHAPTER REPORT

2015-2016

Georgia Southern Beta Iota

A. Initiations

Student eligibility was based on academic standing per Pi Tau Sigma's guidelines. Juniors who were in the top eighth of their class and seniors who were in the top fifth of their class (based on a ranking by GPA and credit hours earned) received invitations to come to an informational session, which amounted to approximately 100 eligible students. As our chapter was only formally chartered last spring, we are still trying to generate increased interest in our organization. Those choosing to join our chapter then paid the $65 membership fee to receive membership materials and a chapter t-shirt at induction. Induction ceremonies, with all appropriate rituals as read from the provided ritual booklet, were performed on October 14th, 2015 and March 9th, 2016. These inductions were registered with the national chapter approximately a week after each was performed. The October induction ceremony was held in a classroom of the engineering building with food catered by Vandy's BBQ. The March induction ceremony was held in the Skybox and adjoining conference room of The Clubhouse, and all members were invited to participate in two hours of free bowling and food catered by the Clubhouse after the initiation rituals were read from the chapter guide. The rental of The Clubhouse Skybox for the two hours of bowling was partially funded by our university's Student Government Association (SGA), after the funding request process was completed.

Table 1. 2015-2016 Academic Year Initiations

Semester	Active	Graduate	Honorary
Fall 2015	11	0	0
Spring 2016	15	0	0

Below are several of our inductees and existing members at the initiation, including the bowling that was hosted afterwards in the SkyBox (pictured below).

B. Chapter Activities

Community Service:

Each member was required to complete at least 3 hours of community service before the end of the semester. Our chapter had approximately twenty active undergraduate members and two graduate student members each semester, excluding members who had since graduated. Approximately three to five members were out participating in either fall or spring co-ops and were excluded from the service requirement for the semester during their co-op. Newly initiated students in the spring were also exempt from completing service hours during the spring semester, as the induction was held late in the semester. Overall, our active members completed just over 155 service hours for the 2015-2016 academic year.

Members were encouraged to keep the service hours as engineering-related as possible; however, exceptions could be made at the discretion of the President and the Faculty Advisor. Community service activities included a wide variety of events, including peer tutoring in the department's peer tutoring lab and helping build a house for a local veteran during a spring Habitat for Humanity build day on March 5th from 8am until noon. Some members stayed later in the afternoon to help the build progress further. Almost all of our active members participated in the build day, with 15 members earning all of their service hours for the semester in one day. Several pictures from the build day are shown below. Almost all of those pictured in the photographs below are members of our chapter along with the Habitat for Humanity build site-leaders.

Many members also participated in three of the local elementary schools' STEM spring outreach nights in February and March, where our chapter hosted a table that featured the construction of "candy catapults" and gumdrop bridges for children grades K-5. These events are coordinated by the local elementary schools, but university groups are encouraged to participate to provide the supplies and knowhow for their selected age-appropriate activity. The outreach activity at the Mill Creek Elementary School is pictured below with the classroom where our chapter hosted the "Gumdrop Bridges" activity for grades K-2. The room across the hall was also hosted by our chapter with the "Candy Catapults" activity for grades 3-5. These catapults were constructed using five popsicle sticks and two rubber bands each, with one popsicle stick having a ketchup cup pre-hot-glued to it (to avoid possible burns from the hot glue for the children). Children of all ages and families were invited to complete either activity.

Our chapter also hosted a spring canned food drive in late April with all donations given to the Statesboro food bank. We managed to raise just over 100 cans to be donated during the two-week drive. Individual members also branched out to help paint a local hair salon and to help mend electrical fences at the Heart of Dixie Equine Rescue. Other members volunteered with a local gardening program and the local “Stirrup Some Fun” therapeutic riding program.

Convention Participation:

This year our chapter was able to send one faculty and three student representatives to the 2016 Pi Tau Sigma National Convention in Los Angeles, California, including our chapter adviser (Dr. David Calamas), our president (Jennifer Shaffer), our vice president (Matthew Willingham), and our recording secretary (Liza “Talia” Zamora). All representatives were excited to finally see the West Coast, and we were able to bring many great ideas back to our campus to implement them in our chapter. Two of our representatives (Matt and Jennifer) were also able to take part in the SpaceX tour and greatly enjoyed it. Our representatives are pictured below in the SpaceX group photo and also a photo after the formal dinner at the Town and Gown.

Chapter Meetings:

Chapter meetings were held once a month during the fall semester, and twice a month in the spring, as more events were held in the spring semester. Members were given a list of the meeting dates at the start of the semester, and the meetings were held every two weeks at 6:30pm on a Wednesday night. Paper agendas were given out at the time of the meeting which outlined the topics covered, and this agenda was then sent along with reminders by email to all members after the meeting.

Meetings at the beginning of the semester primarily dealt with professional development and guest speakers to help students improve their resumes and interview skills when applying for jobs and co-ops at our university's February STEM career fairs. Meetings in late February and March dealt primarily with completing service hours and discussing upcoming involvement in the Design for Autodesk competition to possibly raise funds in the fall for chapter use. The April meetings were designed to celebrate increased member involvement in the spring (members completed an average of 3 hours each in the fall, and 5 hours each in the spring) and included a pizza party to encourage networking. The final meeting of the semester took place a week before final exams (last week in April) and was meant to help members relax by having pizza, snacks, and soda while hosting a mini

LEGO-building competition and watching highlights from "The Office" on Netflix on the classroom projector.

Spring Graduation Banquet:

Due to high costs and a lack of interest garnered from a department-wide poll, the formal spring graduation banquet was cancelled this year. Arrangements are currently being made to alter the formal graduation banquet to a more informal departmental barbeque to be held at the end of each semester. For the fall semester, a survey will be sent out to all mechanical engineering students and faculty informing them of the date of the barbeque (during finals week) and asking for nominations for the "Purple Shaft" award, "Most Improved Faculty" award, "Most Involved Pi Tau Sigma Member Award" and "Department MVP" award. These awards are tentative and changes will be made as necessary. The barbeque will be held at the recreational facility's pavilion on campus with local Vandy's BBQ catering the food and drinks. All faculty, staff, and students will be invited to attend and will be asked to pay a nominal fee (~$5) to help offset the costs of catering. Our chapter will also petition our school's SGA for partial funding of the event as well. This banquet will be held to celebrate the accomplishments of all graduating mechanical engineering students and will hopefully have a guest speaker. Our chapter will be the primary organizer of the event.

Guest speakers:

Bridges Adams (Career Services)

On January 27th, our chapter hosted Bridges Adams from our university's Career Services department to come speak to our members about how to best prepare a resume for an engineering application, as well as how to navigate the interview process. This included mock-interviews, and members who wished to participate in the mock interviews were asked to dress for the occasion and stay after Mr. Adams' presentation to "interview" with the president of the chapter as well as Mr. Adams. Mr. Adams worked for years in the industry as an interviewer for several STEM-related branches of the government before coming to work at Georgia Southern University as a career-services specialist. He is the primary contact at Career Services for all engineering students, and part of this activity was to increase members' awareness of Career Service's role on campus and to help them become more familiar with utilizing what he has to offer.

Christopher L Willingham, Executive VP of Aviation Safety and Compliance – Wencor Group

Our chapter hosted an industry guest speaker, Mr. Willingham, on February 25th who spoke to all present engineering students about a variety of relevant topics, including how-to's on surviving engineering interviews and how to prepare for them, how to negotiate a salary, what to look for in an employer, and what to expect at your first engineering job, followed by a twenty minute Q&A session. Mr. Willingham received his Master of Science in Engineering from the University of Alabama and has worked with several large corporations over his career, including Wencor Group, the AAR Corporation PMA unit, Honeywell International, the Air Force at Arnold Air Force Base, and NASA at the

Marshall Space Flight Center. Wencor Group is an industry leader in aftermarket aircraft services. All engineering disciplines were invited to attend, and flyers were distributed around the engineering buildings (attached below) as well as distributed electronically through the department's mass emailing system.

WENCOR GROUP

Becoming the World's Leader of Aftermarket Solutions

Attention All Engineers!

On **February 25th at 5:30pm in engineering room 2112** we will host a guest speaker from Wencor, a leader in Aftermarket Aircraft Services.

This event is sponsored by Tau Beta Pi (National Engineering Honor Society) and Pi Tau Sigma (National Mechanical Engineering Honor Society).

This event is for all engineering disciplines and will focus on professionalism in the workplace.

Some topics the guest speaker will cover:

- How to survive an engineering interview
- What can I expect in my first engineering job?
- Who should I go to work for and why? (What to look for in an employer)
- I'm an engineer – why should I be humble?
- Questions / Answer session – open forum and can address questions on or off topic

If you have any questions please contact Matthew Willingham (acting president of Tau Beta Pi and VP of Pi Tau Sigma) Email: mw05727@georgiasouthern.edu

PMA MRO DISTRIBUTION

Departmental Involvement:

Members were encouraged to volunteer their time at the departmental peer tutoring center, and several members also volunteered in department outreach activities with the local elementary and middle schools, such as the 4th Grade "Quest" visit day and the 8th grade visit day by helping coordinate the mystery design challenge (catapults made from assorted materials) for those events as well as leading laboratory tours for prospective students and their parents during the university's College of Engineering and Information Technology (CEIT) visit day for upcoming freshmen students. Lastly, our chapter also spearheaded the effort to unite all mechanical engineering-related organizations on campus to host an advertisement in our university's "Blue and White" publication that is distributed to all incoming freshmen during the orientations in the summer. Our chapter's executive board created interest in the endeavor and spoke to the presidents of all of the involved clubs to pitch the idea and collect the funds for the advertisement. A copy of this advertisement (designed by the president of our chapter) is shown below.

C. Other

This year our chapter won the university-wide "New Student Organization of the Year" award at the 19th Annual Leadership Awards Banquet at Georgia Southern University. This award is reserved for an organization that is less than three years old on campus and has significantly increased its level of effectiveness and involvement with campus life. Below is a picture of the award itself with its inscription, as well as a picture of our president accepting the award from Dr. Thompson, the Vice President of Student Affairs and Enrollment Management, on behalf of the chapter at the banquet.

Additionally, our chapter has agreed to stewardship of at least two on-campus lending libraries to increase our presence and involvement in the university community. These libraries are a part of the "Boro Book Nooks" little free lending library program that is being established in fall 2016 though the campus' Office of Leadership and Community Engagement. These libraries are modeled after the "Little Free Library" national organization, and are meant to promote literacy in the communities in which they are located.

Several other honor societies on-campus are participating by holding book drives to stock the libraries, but few have offered to be stewards of the libraries by keeping them in good shape. Stewardship involves the continued twice per semester maintenance and restocking of the libraries by helping communicate the maintenance needs of each library to the program. A formal vote of the chapter will be conducted in the fall to put the upkeep of these libraries in the bylaws of our local chapter. Members will also be invited to help in the construction of these libraries in the fall, as several of the structures will be designed to be outdoors and will require the help of knowledgeable mechanical engineering students, and our members expressed interest in community service projects that involve hands-on construction.