PI TAU SIGMA ANNUAL CHAPTER REPORT
2009- 2010
Tennessee Technological University Sigma Nu
Report prepared by Mallory Johnston, Sigma Nu president 2009-2010

During the 2009-2010 academic year, Tennessee Technological University Sigma Nu chapter of Pi Tau Sigma initiated 19 new members, presented educational seminars on topics from graduate school to HIV/AIDS testing, picked up over 15 bags of trash from a local park, signed 30-something holiday cards, washed over 20 faculty and staff cars, and sold out of hand-made hamburgers and desserts. Many new activities were introduced to the initiates and members of Pi Tau Sigma to build a stronger academic and professional network. Service opportunities were created to help better the department, the campus, the community and the members of Pi Tau Sigma.

Initiations

During the 2009-2010 academic year, two initiations were performed by the Tennessee Technological University Sigma Nu chapter. One was performed in the fall semester on December 10, 2009 where nine new members were gained. Another initiation was performed in the spring semester on April 29, 2010 where ten new members were initiated. At the beginning of each semester, a list of approximately 12-16 students from the top 25-33% of the undergraduate mechanical engineering students who have attained junior to first semester senior status based on academic hours earned is created. This list is presented to the mechanical engineering faculty where individuals are recommended by the faculty based on the student's merit and integrity. At the beginning of each semester, invitations are created and delivered to potential initiates in a public manner such as a class lecture. The public announcement helps to celebrate the student and publicize the society.

Figure 1: Tennessee Tech Sigma Nu 2009-2010 officers

Once invited to be a member of Pi Tau Sigma, an initiate is required to perform the following requirements before the time of the initiation:

1. Attendance of meetings: Initiate must attend at least 80% of meetings held over the semester unless having prior consent to miss.
2. Shine Pi Tau Sigma key: Initiate must make sufficient effort shining the Pi Tau Sigma key.
3. Signature list: Initiate must attain 65% of the active members' signatures and 75% of the mechanical engineering faculty's signatures.

Figure 2: Shined keys and signature sheets

4. Service hours: Initiate must perform at least eight hours of tutoring and six hours of other Pi Tau Sigma service events to be discussed in further detail under Chapter Details.
5. Dues: Initiates must pay national dues and chapter dues totaling $50.00.
6. Attendance of initiation: Initiate must attend and perform the rituals associated with the legacy of Pi Tau Sigma at Tennessee Tech.

If an initiate begins the initiation process but is unable to meet all the requirements, based upon the decision of the current Pi Tau Sigma president and faculty advisor, the initiate may be invited to finish the requirements the following spring or fall semester.

During the fall semester initiation, refreshments are served prior to the official initiation's ceremony and rituals. For the spring semester initiation, the fall and spring initiates are invited to attend dinner with a speaker who is typically a Tennessee Tech graduate and Pi Tau Sigma member. Dress for the initiations is business casual. During both semesters the initiates turn in their shined keys and signature sheets. Initiates are then led into a dark room lit by several candles. At the front of the room, the officers and pictures of the Pi Tau Sigma crest and key are found at a table covered in murray and azure table clothes. The rites and rituals of Pi Tau Sigma are read to the initiates by the president and vice-president of the Sigma Nu chapter. The members pledge to uphold the standards of Pi Tau Sigma and the qualities associated with being a respectable engineer. The new members then sign their names into a leather-bound book that all the members from over the past decade have done before them.

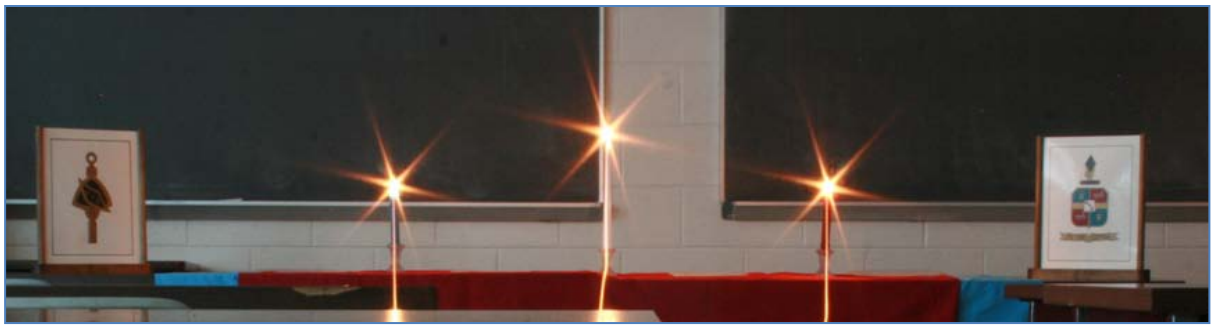

Figure 3: Initiation ceremony room set-up

After the ceremony and rituals, new members, officers, speakers, and the faculty advisor celebrate the end of the successful semester over dinner or refreshments. The invited alumni speaker then presents his or her topic to the people present. Previous speakers include employees with NASA Marshall Space Flight Center and Arnold Air Force Base Engineering and Development Center. After the presentation members are allowed to talk with other members and the speaker. Pictures are taken of the new initiates, the group, and candid photos of the event. New members are thanked for their commitment to Pi Tau Sigma and encouraged to continue to stay active with the society even after reaching active member status.

Chapter Activities

Initiates and members were offered a variety of service events to participate in for the 2009-2010 academic year. In previous years, requirements for new initiates were to shine the key, attain signatures, create a poster over an engineering topic, and attend the handful of meetings throughout the semester. Members typically did not participate in the society after initiation. Most of the 500 mechanical engineering students did not know about Pi Tau Sigma, the honors mechanical engineering society. There were new goals and objectives for the 2009-

2010 year to help better the society and its members. These goals include establishing stronger member connections, increasing the publicity of Pi Tau Sigma within the department and on campus, offering more service opportunities and educational seminars for members and other students, and adding a variety of fundraising activities. By the end of the spring 2010 semester, sophomore-level mechanical engineers were asking "How can I be a part of Pi Tau Sigma?" By the hard work of the faculty advisor Dr. Chris Wilson, the officers, the 2009-2010 initiates, and some active members, the new goals and objectives were met and exceeded. A stronger foundation has been poured in preparation for the society's future plans.

One of the continuous service activities that all members had to participate in is the tutoring of lower-division courses for engineering students. All initiates had to perform eight hours throughout the semester in the evening of tutoring. The mechanical engineering department allotted a room and two computers to be used by Pi Tau Sigma for tutoring. This room is located adjacent to the student study lounge and the engineering computer lab. Initiates and active members are encouraged to spend time studying and being available to tutor at any available times. This encourages student interaction and mentoring within the department and academic help. Improvements towards this program include creating an online schedule so students who need help know when to show up and more tutoring hours performed by more members.

Another ongoing activity is the collection of organization of used text books for the engineering student study lounge. Older versions of text books from various professors that have been donated though out the years were organized and shelved in the student study room. Members also surveyed the books and decided what areas of interest were needed to diversify and complete the library of books available in the student study room. Continued upkeep of the lounge and the donated books is another small way Pi Tau Sigma at Tennessee Tech is helping to give back to the mechanical engineering department.

Sometimes service events include volunteering with activities sponsored by the college of engineering. Pi Tau Sigma tries to participate in the events including Homecoming, Engineering-A-Future, the engineering career fair, E-Week events and other activities. Sometimes the work includes assisting a professor with a demonstration, helping set-up tables and chairs, or inspiring young girls to continue educating themselves in the fields of math and science (Engineering-A-Future).

Figure 4: Members from the spring 2010 park clean-up and some trash collected

Twice during the 2009-2010 academic year, Pi Tau Sigma headed a clean-up for a popular, local park. In the fall, a handful of initiates and members spent about four hours cleaning up the woods and grassy areas often overlooked during regular maintenance. It was such a success that the event was repeated in the last spring. During the spring clean up, some of the initiates of the engineering honors

society Tau Beta Pi helped with the clean up. Approximately 16 students (Pi Tau Sigma members, Tau Beta Pi members, and others) helped with the clean-up and collected about ten bags of trash.

Several seminars and tours were supported or presented over the year by Pi Tau Sigma. The attendance of the seminars and tours counted towards required meetings and/or the six hour service requirement. The organization AIAA arranged tours of Arnold Air Force Base and NASA Marshall Space Flight Center. Members were encouraged to attend the tours to help them gain more knowledge in potential job fields. A graduate school seminar with a question and answer session with Pi Tau Sigma graduate students allowed current students a chance to get a different perspective and questions answered concerning graduate school studies in the engineering field, the GRE, the application process, and the fast track to attaining your MBA with an undergraduate engineering degree. For World AIDS Day in December of 2009, Pi Tau Sigma was one of several organizations that helped with Free HIV Testing on campus. Pi Tau Sigma made announcements via email and flyers about the presentation and the free testing. The president of Pi Tau Sigma presented factual and personal information about the disease and the importance of testing. Attendance to the presentation counted towards the 80% of meeting attendance. Actually partaking in the free HIV testing counted towards service hours. Removing the stigma associated with being tested was the main goal of the event. After discussing with several students about their future aspirations, a presentation over how a mechanical engineering student can prepare for medical school was given. Areas such as what extra courses a student needs to incorporate into the already over-loaded mechanical engineering schedule, what organizations on campus to become involved in, and what areas medical schools examine when a student applies such as volunteer work. Since there isn't a direct overlap between mechanical engineering and the pre-health sciences, there wasn't an exact path to follow. The unexpected attendance at this seminar showed that mechanical engineering students want to do more with their engineering degrees than what is currently suggested. Many of the seminars presented by Tennessee Tech Pi Tau Sigma did not require an outside speaker but only members who had an interest in a specific topic.

Figure 5: Faculty and staff appreciation car wash

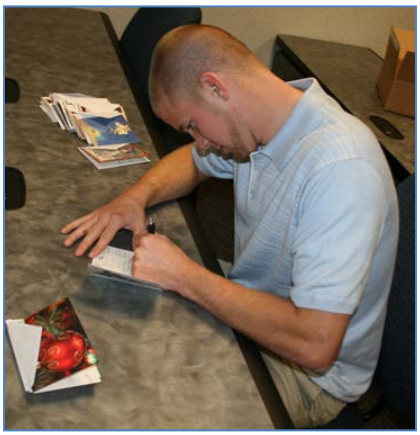

Figure 6: Member signing one of the holiday cards delivered to faculty and staff

Members and initiates are reminded that the jobs they attain in the private sector and government are because of their education from Tennessee Tech. The education received

is one that would not exist without the hard work and experience of the faculty and stuff in the basic engineering and mechanical engineering departments. For the winter holiday season, officers and initiates signed and delivered over thirty holiday cards thanking the faculty and staff for their support of Pi Tau Sigma. Donations from members bought the faculty and staff some small snacks during finals week in the fall 2009 semester. In the spring 2010 semester, a faculty and staff appreciation car wash was performed. With around a dozen members helping wash cars, over 20 cars were washed in about four hours. This event was fun for the participants, appreciated by the faculty and staff, and a way for people to walk by and ask "What's going on?" Members would tell their friends passing-by "Pi Tau Sigma is washing cars as an appreciation thing for the faculty and staff." It was another way for the chapter activities to publicize the society on campus.

Due to limited funds, Pi Tau Sigma sent two members to the 2010 national conference in Texas. The members that attended the conference are the 2010-2011 president and vice-president. For the 2011 national conference, Tennessee Tech Sigma Nu hopes to send more members to the conference. To do such a thing, the chapter must increase its funding. The fundraising events performed this year include selling Pi Tau Sigma stoles and cords to graduating seniors, donations made from the car wash, and a cook-out & bake sale. The costs of the cook-out & bake sale were compensated partially due to donations from local grocery stores and getting members to bake desserts for the bake sale. This was the first time for a cook-out or a bake sale. The cook-out completely sold out in about two hours. The bake sale lasted through most of the afternoon but also mostly sold out. Other ideas for fundraising for next year include a t-shirt sale, a car smash, and pursuing more alumni donations.

Closing Statements

Pi Tau Sigma at Tennessee Tech did a lot of new events during the 2009-2010 academic year. The society increased its involvement on campus and within the department. It was involved in a variety of events and topics for the diverse interest of the members of the group. Because of the support from the faculty advisor and the hard work of the officers and initiates, Pi Tau Sigma has become an organization with the capability to do anything the members want. The potential of the group has expanded. During the elections for the 2009-2010 officers, not many individuals wanted leadership positions.

Figure 7: 2010- 2011 officer team of Pi Tau Sigma

During the elections for the 2010-2011 officers, mostly new initiates were excited and motivated about the possibilities the next year had in store. Emphasis was placed on electing members who not only were qualified for the positions but also had the time available. With all the excitement and ideas generated, Pi Tau Sigma elected to create a new officer position called "alumni relations" that will help create newsletters for alumni and supporters, help organize and publicize events, and assist the rest of the officer team. The officer positions include president, vice-president, secretary, treasurer, webmaster, and alumni

relations officer. With the foundation created and excitement generated by the society in the past year, the next year's leaders have the ability to build something great and start a network of soon-to-be young professionals in society.