PI TAU SIGMA ANNUAL CHAPTER REPORT

2010-2011

University of Florida Sigma Omicron

A. Initiations

At the University of Florida, students who are in their third year or have the equivalent 90 credits, are in the Mechanical and Aerospace Engineering department, and are in the top 35% of their class are eligible candidates for the Sigma Omicron chapter. During the first month of the semester, our chapter receives this list of candidates from the Undergraduate Student Program Assistant for the Mechanical and Aerospace Engineering department, Salena Robinson. The candidates are contacted by the current vice president of initiates and are informed of their selection and invited to an introductory meeting.

Candidates who attend the introductory meeting are lectured by the president and vice president of initiates on Pi Tau Sigma and how our chapter interacts with the engineering community. Other officers introduce themselves and describe their roles in the chapter. After the meeting, all candidates who are interested in becoming initiates are invited to write their names down and begin the series of requirements needed to become a member.

Initiates are required to go to six events, but are encouraged to attend more and get to know the other members. They must attend: one Pi Tau Sigma sponsored lab tour, company information session, or related activity; one service project; one fundraising event; one chapter social; the end of the semester Kick-Ball game, usually placing the officers against the initiates in a fun way to end the semester; and the initiation ceremony. Initiation is mandatory and is usually held the week before finals. If an initiate cannot attend a certain event and would like to substitute another, e.g., an initiate cannot attend the last lab tour of the semester and instead wants to attend two fundraising events; they must obtain permission from the vice president of initiates. A one-time dues payment is needed before the initiation ceremony. If any of the requirements are not met or if the initiate cannot attend the initiation ceremony, they must wait until next semester to be initiated, if they are still eligible. Additionally, when an initiate pays their dues, they receive a Pi Tau Sigma key. Initiates are encouraged to polish their keys. At initiation, the initiate who has the best looking key, as voted by the officers, receives a prize.

The initiation ceremony follows tradition. Initiates are brought into a room with the current officers at the front of the room. A table decorated with Pi Tau Sigma memorabilia and the coat of arms is in the middle of the room, if the table is available. The president and vice president of initiates follow the Pi Tau Sigma initiation handbook and describe the coat of arms and the values of Pi Tau Sigma. Once the initiates pledge to uphold the ASME code of ethics, they are congratulated and welcomed as members. To signify this, they are taught the chapter's secret handshake and shake hands with the officers.

At the end of the spring semester's initiation, officer elections are held. All members, including those who were just initiated, can run for a position. Only current officers can run for president and either vice president office.

Our chapter held two initiations this year. The fall initiation was held on Tuesday, December 7th and saw 11 new members added to the Sigma Omicron chapter. The spring initiation was held on Tuesday, April 19th and saw 18 new members, a record-breaking number for Sigma Omicron. Of these new members, six of them were elected officers for the next year. The seven graduating officers welcomed and congratulated the new officers.

B. Chapter Activities

The Sigma Omicron chapter is involved in many activities that promote involvement in the local mechanical engineering department and introduce students to excellent opportunities for their future. The Undergraduate Research Symposium is an annual event in which undergraduate students can share their research with faculty, leaders, and other students in their respective departments. The best presenters are invited to an awards banquet and dinner where many professors, students and alumni will attend. Our chapter organized the Mechanical and Aerospace Engineering department's presentations. The top three presenters were awarded and given the opportunity to talk with several prestigious alumni who are currently working in the Mechanical and Aerospace Engineering field.

The annual E-Fair is a well-recognized event at the University of Florida. At the E-Fair, engineering groups from all the departments come out and demonstrate the fundamental ideas of their core learning to elementary and middle school students, as well as faculty, visiting alumni, and fellow students. The Pi Tau Sigma display this year demonstrated angles and the affect they have on motion. The first setup was two identical stands made of wood and holding clear rubber tubing in a "U" shape with an adjustable height at the end. A marble can be placed at the top of the tube and, depending on what height the end is set at, will fly out of the tube and land in a target bowl with a cup in the middle. The goal is to find which height is the best for the marble to land in the cup. The second setup was two adjustable inclined planes facing away from each other with two simple racetracks placed on the planes. Small toy cars can be placed at the top of one plane and when released, depending on the angle of adjustment, the car will either stop abruptly or continue going back and forth for a short while. The booth was well attended and several children stayed with their parents after the fair closed to continue enjoying the displays.

Several of our chapter's officers attended the annual Mechanical and Aerospace Engineering Department Banquet. These officers represented our chapter and presented the Outstanding Alumni Awards to influential University of Florida alumni. Four of our chapter's officers, two of them graduating officers, also attended this year's Pi Tau Sigma National Convention in Chicago.

Members of the Sigma Omicron chapter receive email updates of events happening in the local Mechanical Engineering department. Graduate students contact our advisor and ask for any Pi Tau Sigma members who are interested in working in a research workshop. Members

are invited to seminars and department lectures being held by professors and those working in the Mechanical Engineering field. Our officers arrange tours of engineering professors' laboratories that are open to all members and initiates. These laboratory tours are a great way for members to meet professors and have a chance to talk to them about research opportunities. Our advisor invited any members who were interested to join a small satellites and deployable space structures design team that is partnered with KTH Royal Institute of Technology in Sweden on designing a deployable boom for a small satellite.

Our chapter collaborates with other engineering societies for organizing more activities. GatorTRAX is a program that introduces many engineering related skills and ideas to elementary, middle, and high school students. The Sigma Omicron chapter works together with the Florida chapter of Tau Beta Pi in teaching these bright young minds new concepts. Officers and members explain to the students, through physical examples, basic concepts of physics, such as velocity and acceleration. Our chapter also works with ASME on various projects. We worked with ASME and traveled to local elementary schools, demonstrating some hands-on engineering activities to introduce concepts to children. Another time, we helped ASME with the annual SwampFest Charity Car, Truck, and Motorcycle Show. All proceeds from the show benefitted The American Lung Association.

Additionally, our chapter holds many fundraisers and social events. Our polo shirt sale over the course of this year was phenomenal, bringing in more sales than previous years and allowing us to expand our inventory into more sizes and styles. Our social events range from picnics by Lake Wauberg to a barbeque at an apartment complex. These events are always well attended by members and officers alike. Initiates attending these socials are given the chance to personally find out who their officers are and generally have a great time. The end of the semester Kick-Ball game is another great social event, as described before.

The Sigma Omicron chapter holds meetings every month and a half in the fall and spring semesters. This year, we have shifted from less physical meetings to more weekly email updates. At least once a week, members can expect to see an email from our chapter about the latest events happening in the Mechanical Engineering world.