UNIVERSITY OF TEXAS EL PASO

Pi Tau Sigma Annual Report 2010-2011

TEXAS DELTA GAMMA

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Introduction

Prior to describing our activities over the past academic year, I would like to inform the National Chapter that the Texas Delta Gamma Chapter went through substantial changes, in the selection process, initiation ceremony and general rules of practice since I was elected Chapter President in the spring semester of 2011. Currently our chapter is designated *inactive*, due to the fact that annual reports have not been submitted and member registration has not occurred since 2008-2009. Many guidelines and procedures have not been observed over the past two years and my highest priority as Chapter President was to resolve these issues and implement a plan to ensure the Texas Delta Gamma Chapter adhered to the guidelines set forth by the National Chapter. This proved to be more challenging than anticipated; however I am confident that by the end of the fall semester 2011 all issues will be resolved.

Initiations

Requirements

Membership into Pi Tau Sigma Honorary Mechanical Engineering Society, Texas Delta Gamma Chapter should be extended to only the highest caliber of student. Pledges must demonstrate high scholastic achievement and display extraordinary academic accomplishments. Members of PTS-Texas Delta Gamma must include only the top students from the Mechanical Engineering Department at the University of Texas El Paso. Based on this criteria and discussion with our faculty advisor Dr. Ahsan Choudhuri, the officers set a new minimum academic requirement at UTEP. In addition to representing the top 17% of the class for both juniors and seniors they must also have a minimum cumulative GPA requirement of 3.4 or higher.

Application Process

Candidates who meet the academic requirements are sent an application packet, which was put together by the Vice President of the Texas Delta Gamma Chapter, Alexander Gonzalez and I. This packet includes the following:

Welcome Letter

This is an introduction and explanation about Pi Tau Sigma and the requirements membership into Texas Gamma Chapter. As well as a brief description of how the chapter contributes to the University and the community

PART I General Information

We use this to ensure we have contact information for all new candidates as well as grade level and other general information.

PART II Application

1. Resume – This should include any projects you were involved in, completed or assisted in. Internships, research and any other pertinent engineering skills you have gained while pursing your engineering career at UTEP. We would also like to see education, hobbies and any community service.

2. Cover Letter – This letter should contain your interest in the National Honorary Mechanical Engineering Fraternity Pi Tau Sigma as well as explain why you would be a good candidate to represent Pi Tau Sigma, Texas Delta Gamma Chapter (500 word limit).

**A copy of the packet has been attached as part of the annual report*

Selection Process

Potential members who are interested in joining Pi Tau Sigma are invited to complete the application, which is reviewed by all the current officers. The officers vote yes or no on each potential candidate and the candidate must receive a vote of "yes" from all officers in order to be inducted.

Induction Ceremony and Rituals

All candidates selected as initiates into the Texas Delta Gamma chapter are sworn by a code of honor to protect the secrets of the actual initiation ceremony; however we will share some of our rituals and tradition's. The initiates are blindfolded and told to place their right hand on the shoulder of the initiate in front of them. One of the officers leads the initiates through and around the engineering building; this is an exercise in trust. The initiates must have faith that the person in front of them is going to keep them safe and that the officer will lead them safely through the exercise. During the exercise the initiates are asked question about Pi Tau Sigma, UTEP and the Engineering Department at UTEP. Wrong answers or failure to answer may result in not being inducted. The types of questions we ask are what are the PTS official colors, what is on the PTS crest and what do the symbols represent and who is the chair of the mechanical engineering department. Then the initiates are taken to a secret location and inducted by repeating the NSPE Code of Ethics for Engineering and promising to uphold the ideals and values of Pi Tau Sigma Honorary Mechanical Engineering Fraternity.

Fall induction included ten new members; however failure to follow procedure resulted in those inductees not being registered. This is one of the items in the process of being rectified. We were unable to induct members in the spring due to scheduling conflicts, officers leaving early for internships and heavy construction at UTEP. We did receive several applications from several qualified applicants and plan to meet and make a decision as to who will be inducted. An induction ceremony for these students will be held early in the semester. We will send out applications for the fall and have an induction ceremony late in the semester for fall initiates.

Chapter Activities

As a group the officers decided on two main objectives for the Texas Gamma Chapter for the spring semester 2011.

1. Support the Academic Center for Engineers and Scientists (ACES) at UTEP by providing tutoring services
2. Promote education and career opportunities in STEM through community outreach events

Tutoring

ACES is a support and study area at UTEP for engineering students. PTS supported ACES by providing tutoring services for engineering courses. While UTEP provides several tutoring services for Math, Chemistry, Biology and English courses there is a lack of resources for engineering students who need assistance with engineering courses like mechanics of materials or thermodynamics. Some of the top students from PTS volunteered their time to support a tutoring program. The students who volunteered logged on average 30 hours a week in tutoring office hours.

Community Outreach

We were able to visit Ross Middle School and Americas High School in the El Paso community to present information on education and careers in the engineering field and studying at UTEP. We also supported activities at UTEP like the First Robotics Competition and Science Extravaganza. The UTEP Engineering Department supported the first stage of the Frist robotic completion, known as the build phase. This is where teams of students build the chassis to their robot. Science Extravaganza is an event sponsored by the Society of Mexican Engineers and Scientist's. They bring over 300 students to UTEP for a full day of engineering

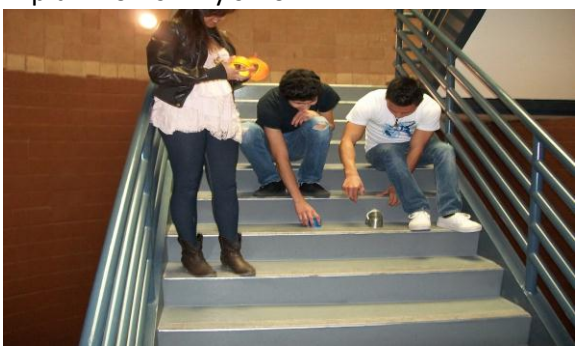
activities and tours. PTS supported this MAES at this event by facilitating an event we called, "Eggciting Roller Coaster". Students had to work in a team to design a roller coaster car that kept their Passenger safe (a real egg). Each group was given the same set of materials and a few guidelines that needed to be followed, besides that they were free to design their car however they wanted. At the end of the exercise the cars were tested on a track built by PTS members. The teams whose "passenger" egg, survived moved to the next round where we crashed the cars into each other to see whose design was best.

Americas High School

President-Mario Rubio speaking to students

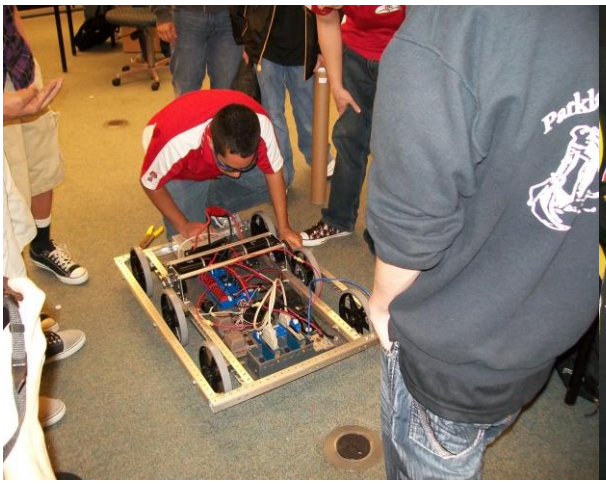
Members-Jorge Frias and Franciso Alvarez

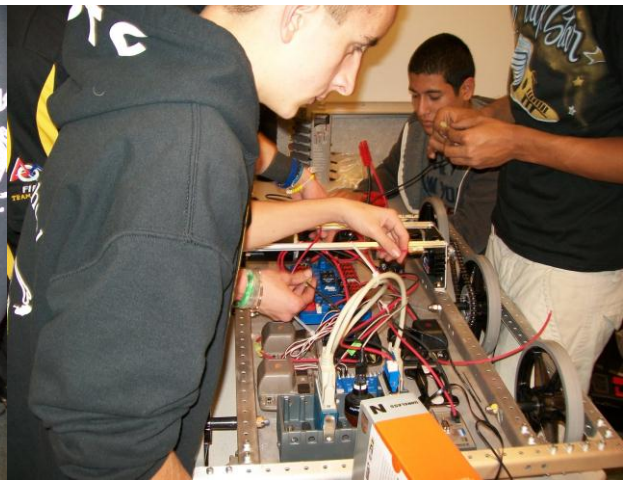
Physics students-attempting to
Explain how slinky's work



First Robotics Competition

Students and Mentor from Parkland H.S.





Science Extravaganza "Eggciting Roller Coaster"

Explanation of the rules

Helping with Designs

Testing Cars