PI TAU SIGMA ANNUAL CHAPTER REPORT
2013-2014
Purdue Beta

Initiations

Undergraduates entering their fourth semester at the university, or second semester within the school of mechanical engineering with a GPA of 3.6 or greater are invited to undergo the chapter pledge process. This GPA requirement is decreased by one tenth of a point for every additional semester the potential member has been in the school of mechanical engineering. A minimum GPA of 3.3 is required for eligibility to enter the pledge process for students with senior standings.

The pledge process begins with invitations being sent to those eligible students to attend the pledge callout, which traditionally occurs within the first month of every semester. The Vice President of Pledges presents to those eligible the perks of membership, requirements for membership, the necessities for completion of the pledge process, and briefly describes the basics of the Purdue Beta chapter. Near the conclusion of the callout the current executive board is introduced and the floor is opened for any questions potential pledges may have concerning the organization. At the conclusion of the callout attendance is taken of those interested in undergoing the pledge process.

Once those interested in joining the organization have been identified they are required to attend biweekly pledge meetings held throughout the semester. The objectives of these meetings include pledge bonding, education regarding Pi Tau Sigma, and identification of pledge responsibilities. These responsibilities include, but are not limited to, organization of a pledge service event, establishment of leadership roles within the pledge class, aid in operation of a chapter-run lounge, donation of acceptable tests to a test bank, and familiarization with the chapter officers, chair, and active members. The pledge leadership roles include positions of Service Chair and Trivia Chair. These positions are intended to mimic the corresponding active positions in the organization and aid in identifying involved individuals.

One of these developmental positions in particular is viewed as a recruitment tool for leadership within the active division of the chapter, this being the pledge service chair. Traditionally this position allows a pledge to organize and direct the pledge service project with the help of the VP Pledges and other active members. During both the Fall 2013 and Spring 2014 semesters this pledge has organized a PTS sponsored after school carnival at the local Boys and Girls Club. This event is explained in more detail below. However, it was decided that pledges should have access to active

service events as well as the carnival, so many of the service events throughout the semester were attended both pledging and active members. The intention of this initiative was to induce interaction between pledges and active members, with the ultimate goal of building both social and professional relationships.

Prior to pledge initiation, pledges are required to interview at least five officers or chairs and complete signature sheets that include every officer, chair, pledge, and a defined number of active members and professors. The pledge process culminates in a pledge exam, testing the potential members in areas such as Pi Tau Sigma facts, both on the national and chapter levels, general engineering knowledge, and familiarization with the name sheets. These exams are then graded by the VP pledges who presents to the executive board a list of those members he or she has seen fit to join the organization based upon test performance and attendance based criteria.

Those pledges that have proven their dedication to the organization by performing at a high level in all criteria for active membership are initiated into the organization during the final week of the academic year. Initiation takes place in front of the entire executive board who describe the basic principles of Pi Tau Sigma to the newly inducted pledge class. It is at this point in time that the pledge class signs their names into the chapter membership log book and pledges make the transition to active members. The initiation is concluded and all active members are assembled at an end of year banquet to discuss the semester's activities and select officers for the upcoming semester

Fall 2013 Pledges 20 Activated December 3rd, 2013	Spring 2014 Pledges 14 Activated on April 29th, 2014

Chapter Activities

PTS Tutors: Another unique opportunity that is offered to active members of the Purdue chapter is to tutor struggling students in the ME student body. A Tutoring Chair is tasked with managing requests submitted through the chapter website and matching students with active member tutors. Active members are selected to tutor students based upon their performance in the respective classes. Throughout the past semester the number of tutors within the organization has been around twenty students with many of those tutoring in multiple classes.

PTS Sponsored Review Sessions: The chapter additionally sponsors review sessions for

introductory mechanical engineering classes such as thermodynamics, statics, and dynamics. Many of the chapter's members are teaching assistants or graders for these classes and thus are well qualified to hold these review sessions. The materials covered in these sessions are past exams that our members completed when they themselves took these same classes in past semesters. They review sessions been very successful as a form of increasing awareness of our organization, its presence in the ME community, and providing a pro bono service for younger students. We tend to hold one sessions for each of the three mid-term exams in each of these classes which can get attendance upwards of 60 students.

ME Forum: This is arguably one of the most beneficial events that this chapter organizes when it comes to improving the greater ME community. This event traditionally occurs during the final academic week of every semester and consists of an open forum between students and faculty with discussion mediated by the PTS president and recorded by the secretary. For students, it is an opportunity to have a large number of faculty on hand who can collectively address their questions or concerns. This event is beneficial for the faculty because it allows them to understand what students would like changed. The secretary's notes are distributed to the entire ME community at the conclusion of the forum so those not in attendance can familiarize themselves with relevant issues. Talking points are gathered by implementing school wide polls in the week prior to the event. Examples of issues raised in the past include but are not limited to course sequencing and organization of the ME plan of study, class scheduling, academic honesty policies, facility access, implementation of online classes, out of classroom educational resources (use of blogs, lectures uploaded to the internet, and chat rooms for virtual TA office hours), and many more. Faculty members present include the department head, the head of all the computer labs, the head of undergrad studies within course coordinators, any additional professors, and ME facilities employees are always appreciated. The chapter provides refreshments to encourage attendance.

Mechanical Engineering Social: The ME social is traditionally a biannual event, occurring during the final week of every semester. The event allows students a break from studying and an opportunity to unwind and socialize with fellow ME's and faculty members. This event takes place at a local bar and the chapter provides food to those in attendance. Additionally commemorative pint glasses are

distributed to the first hundred in attendance. PTS members invite as many professors as possible to this event, with attendance this year being between three and five in the fall and spring semesters. A faculty versus student trivia game is the main event while at the bar, with questions being generated either by the pledge class or the Social Chair. This event is traditionally one of the largest the chapter organizes, with attendance between 150 and 200 people during the dead week socials. The mid-semester social had lower attendance and thus has been discontinued in upcoming semesters. This year, two additional mid-semester socials were organized in the spring and fall due to the events popularity. These were more unofficial socials that did not include the pint glass distribution but still allowed for an opportunity to unwind with fellow students.

Lounge Sales: One way in which the chapter is able to provide a service to the ME community is by sponsoring and organizing a lounge in the mechanical engineering building. With the completion of a new wing of the ME building the chapter was given valuable space in a public kitchen area. Active members and pledges sell snacks and refreshments purchased with the chapter's funds at reasonable costs to the mechanical engineering student body, faculty, and staff. The act of manning lounge hours is critical in the pledge process and remaining an active member of the chapter. In the spring semester funds were dedicated to the purchase of a laptop for the lounge that is used to track inventories, sales, time of sales, and relative popularity of items. Knowledge of these parameters allow for the optimization of hours worked and inventory stocked with respect to time throughout the semester. The lounge is the responsibility of the Lounge Chair who in turn reports to the Vice President of Sales. Our goal with this endeavor is to provide a service more than aiming for profits, so we sell all items at the lowest prices we can offer without taking losses.

Test File Sales: In the past another cornerstone operation has been the chapter test sales office. Our active members are tasked with collecting and maintaining a test bank for a number of past exams given in core mechanical engineering courses. The Test Files Chair, who is responsible for ensuring adequate supplies of exams every week of the semester, directs this operation. Like the Lounge Chair this position reports to the Vice President of Sales. Additionally, similar to the lounge a desktop computer is used for tracking exam sales, contains a calendar of all exams in the ME department, and also contains many key PTS related documents. The exams in the test bank consist of tests that active members have taken and received a 90% or above on and in most cases have edited the completed

test, correcting any mistakes. These corrected exams are then photocopied and sold to the ME community at the reasonable price of $0.75 per exam.

Industry Information Sessions: During the fall semester the chapter hosted a few special speakers at our actives meetings. These speakers were company representatives from Micron Technologies and Honeywell Aerospace looking specifically to recruit Pi Tau members. These events are relatively simple and usually require the chapter to simply reserve a location and publicize the event for the company, which in many cases supplies refreshments and promotional items. The presence of these speakers has been part of an effort to increase the benefits of being a Pi Tau member at Purdue. These information sessions are in addition to the other aforementioned events with Honeywell, Emerson, GE, and Schlumberger. Ultimately the chapter would like to serve as an intermediary, connecting the highest achieving mechanical engineers at Purdue with the most highly sought after positions in industry.

GE Day in the Lounge: The GE Day in the Lounge was an industry-sponsored event with an emphasis on recruitment cosponsored and organized by the chapter. This event consisted of two representatives from GE, one of whom who is the lead recruiter at Purdue, providing funding and supplies for the days activities. The representatives offered advice on successful interviewing, creating attractive resumes, and general advice valuable to any ME undergrad. This event provided complimentary snacks to students within the ME community at Purdue. Between two and three PTS members volunteered throughout the morning to aid in setup and distribution of snacks.

Design Creativity Seminar Fall 2013: The chapter holds a daylong event at an off campus retreat center in the fall of every year with Schlumberger called the Design Creativity Seminar. This event is open first come first serve to anywhere between 20 to 25 mechanical engineering students. This is a very unique event in which a professor emeritus within the school of mechanical engineering returns with any number of Schlumberger representatives, historically between three and five. The main activity for the daylong event is a design project. The goal of this project is to attempt to inspire creativity and emphasize the notion that in many real world engineering problems there are usually many “correct” solutions and to arrive at the best solution nontraditional thought processes may be required. Schlumberger will cover all costs incurred such as reserving the retreat center, meals for breakfast, lunch, and dinner, and the purchase of creativity related supplies.

Resume Book: Of the active members about 60% chose to submit their resumes to be publicized in this document. Once submitted about half of those in the book received interest from industry. Interest is defined as an effort to reach out to our members via email or phone on the part of interested companies. In the spring semester another edition of the resume book was created including new active members and updated resumes. In the future this resume book may be touted as another valuable incentive to encourage participation within the chapter. Additionally it serves to get our name out to industry members which can peak their interest for possible future information sessions and sponsorship.

Annual Alumni Newsletter: Purdue Beta also creates an annual newsletter which we send to all of our alumni. The purpose of this publication is simply to update alumni on the goings on of the chapter, what the students are doing, where they are going, and hopefully encourage interaction and communication between current members and alumni. The reaction to this publication, distributed using an email mailing list was greater than expected, with many alumni replying to simply check in with current officers and chairs that they had once held. Additionally the organization benefits as this newsletter acts as a fundraising venture.

Compilation of Senior Composite: A small but critical service that our chapter provides for the ME community is the compilation of the senior composite photo. Every semester a Pi Tau member, the Composite Chair, works with various staff members to organize a timetable for graduating seniors to have their photos taken. These photos are then sent to the Composite Chair where they are post-processed and imported into the final composite template. In the fall semester of this past academic year this process was streamlined with the creation of a program for automatically cropping images and importing them into the composite.

End of Semester Banquet: At the end of every semester the chapter holds a banquet for both the incoming new members and the outgoing graduating seniors. The chapter either rents a local restaurant or has food catered to an on campus location. This is perhaps the biggest internal events and is a great opportunity to take a break from studying for finals and socialize with other members. This is also the event where the next generation of officers is elected in an effort to smooth transitions between semesters. The attendance is normally around fifty people.

Pi Tau Sigma Dodgeball Team: The spring of 2014 semester saw the creation of the first ever Pi

Tau Sigma intramural team. Intramural coed dodgeball was initially selected, but due to the lack of interest on behalf of many of our female members the team entered in the Men's Open league. This activity actually proved to be valuable to the organization, strengthening relationships among those participating and helping to get members more involved that may not have necessarily taken that first step on their own. The team was also a surprise as they proved to be unexpectedly good at dodgeball, making it to the semifinals of the league tournament. Hopefully in the future a sport will be selected that will encourage female involvement as well, but considering this was the first attempt at involvement in intramural sports this activity was deemed a success.

Officer, Active, and Pledge Meetings: In addition to the aforementioned events biweekly officer and member meetings are held. Officer meetings are structured to ensure that all activities and events are being completed and that all officers are on task. The President runs this meeting and sees to it that the organization is running effectively as a whole. The active member meetings are held on off weeks from the officers meeting and the VP of Actives or President runs them. The purpose of these meetings is to convey important information about what is happening when and to gather volunteers for certain events as well as an opportunity for our members to get to know one another. Pledge meetings are held on the same days as the officer meetings and are designed to simulate active membership. These meetings are run by the VP of Pledges who is often joined by the remainder of the executive board at the conclusion of the officers meetings. Typically refreshments are provided for each meeting. This creates more of a social atmosphere and it gets more people to come and be involved. Attendance is taken at these meetings and there are a minimum number of unexcused absences each member has to maintain membership in the chapter.

Soldberg Teaching Award: One of the activities the chapter conducts on an annual basis is the polling of the student body to reward special members of the faculty with a teaching award. Pi Tau members are responsible for conducting the balloting in each upper level ME course and gathering results. The responsibility of organizing this activity traditionally falls on the VP of Actives. Only upper level mechanical engineers are polled to ensure that faculty teaching at all levels in the curriculum are considered. This occurs once a year and would not happen without the chapters help.

Service Events

Further motivated by the chapter's success at the National Convention, specifically with respect to the service events it participates in, organizes, and publicizes. The service events that the

chapter contributes to can fall into one of two categories; events solely organized by the chapter and those that the chapter volunteers to participate in but does not necessarily run. As one might expect both of these types of events require different levels of involvement with the chapter. Listed below are the various service events that the chapter has participated in during the 2013-2014 academic year.

BoilerBlast Spring 2014: This event was the primary active service for the spring of 2014 semester. While not organized by the chapter, it is an annual event that is always looking for volunteers and an opportunity for the active members to truly make a difference. BoilerBlast takes place in the spring of every year and is an opportunity for Purdue students and organizations to volunteer in the community, fulfilling the requests of local residents for a variety of domestic tasks such as moving, cleaning, yard work, etc. Officers oversee teams of active members to a location and fulfill whatever task the client has requested. This event occurs on one weekend day early in the semester with jobs varying in length from three to nearly eight hours.

Boys and Girls Club Carnival: Now a tradition within the Purdue chapter, the Carnival sponsored by PTS at the Lafayette Boys and Girls Club is perhaps one of the most popular service events with respect to both chapter members and the children at the club. The event is solely sponsored and organized by the chapter, featuring a bounce house, inflatable obstacle course (always a big hit), a number of small games, basketball, and an arts and crafts station. Every volunteer runs one of the stations or games and distributes tickets to the children who can then redeem the tickets for prizes. This event has traditionally been the pledge service event but due to its popularity and the initiative the chapter has undergone to increase service activities it has been opened up to both actives and pledges. However most of the planning is still done by the pledge class, and is overseen by the Vice President of Pledges

Elementary Outreach: This year the chapter put forth a significant amount of effort to revitalize a cornerstone service event, Elementary Outreach. An active member volunteered as Elementary

Outreach Chair who was in charge of contacting local elementary school teachers at Happy Hollow Elementary and purchasing the necessary materials to orchestrate the event. This event typically consists of between five and seven active members going to the school and building paper plate speakers with the students. The necessary materials for the project consisted of Styrofoam plates, electromagnetic wire, magnets, glue, and paper. This project introduces students to the fundamentals of electricity, magnetism, and sound. Unfortunately due to a particularly cold winter and subsequent snow days, teachers were not able to make time for the event. We will continue to try to orchestrate this event as it poses substantial benefit to those students involved.

Purdue Village Language Practice: A new service we provided in the fall was to volunteer at the Purdue Village in order to help foreign students practice their English. These students lived in an international community within Purdue and were taking classes to hone their English. Around twenty students participated and the event went very well with both ends reporting that they had a good time. During the event, general conversations were held over dinner followed by playing games like charades. This event was very successful and as such we continued on to do the same event again in the spring with similar attendance and will continue to do more in the future.

Creasy Springs Retirement Home: Another new event introduced this year was volunteering at the Creasy Springs Retirement home. During this event, 10 volunteers conversed and played various board and card games with members of the community for two and a half hours. The event was well received and again is something we feel we should continue doing in future semesters.

Chapter Information

Officer Information

	Fall 2013	Spring 2014	Fall 2014
President	Ryan Clark	Ryan Clark	Tyler Berlin
Treasurer	Wenchang Wang	Wenchang Wang	Andrew Wall
VP Actives	Laura Chemler	Adam Potrzebowski	Adam Potrzebowski
VP Pledges	Andrew Yuill	Andy Yuill	Jennifer Boehm
VP IR	Aaron Melemed	Tyler Berlin	Connor Stehr
VP Sales	MingMing Zhang	Andrew Wall	Bryan Filippelli

Secretary	Andrew Schumacher	Rachel Berry	Desarae Diedrich

Chapter Advisor
Dr. Steven Wereley

Contact Information
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