

Contents

1	Fall Advisory Board Meeting	2
2	Fall Officer Meeting #1	4
3	Fall Member Meeting	6
4	Fall GBM #1	8
5	Bowling Social	10
6	GatorTRAX: Electromagnets	15
7	GatorTRAX: Gliders	19
8	Trivia Night Social	23
9	Fall GBM #2	26
10	TBP National Convention	28
11	GatorTRAX: Catapults and Energy	30
12	Volleyball Social	34
13	Fall GBM #3	38
14	GatorTRAX: Homopolar Motors	40
15	Street Clean-Up #3	42
16	Halloween Social	44
17	GatorTRAX: Paper Buildings	47
18	Fall GBM #4	50
19	Bent Polishing Social	52
20	GatorTRAX: Shorelines	56
21	GatorTRAX: Balloon Cars	58
22	GatorTRAX: STEAM Night	61
23	GatorTRAX: Design & Circuitry	63
24	Spring GBM #1	65
25	Valentine's Day Social	67

26 Street Clean-Up #1 72

27 UF Gymnastics Social 75

28 Great Invader Raider Rally 81

29 Great Invader Raider Rally 83

30 Spring GBM #2 85

31 Street Clean-Up #2 87

32 GatorTRAX: Water Filters 89

33 GatorTRAX: Boats & Buoyancy 91

34 GatorTRAX: Prosthetics 93

35 Bowling Social 96

36 Spring GBM #3 99

37 Pi Day Party 101

38 Spring GBM #4 103

39 Bent Polishing Social 105

40 Electee - Only Social 109

41 Street Clean-Up #3 111

42 Spring 2024 Banquet 113

1 Fall Advisory Board Meeting

Florida Alpha

1. Project Information

i. Date(s): 08/29/23

ii. New/Recurring Project: New

iii. Project Areas:

- Custom
- Community/Liberal Culture
- University/College
- Profession/Engineering
- Chapter/Social
- Education/Professional Development
- K-12 STEM

iv. Number of persons who participated:

Category	Count
Members	5
Electees	0

v. Average number of hours per person spent:

Participating	Organizing
5.0	1.0

2. Project Evaluation

i. General Description

The Advisory Board Meeting is held during the first week of the semester to discuss chapter goals, budget review, and upcoming events. The Board consists of the President, Vice President, Corresponding Secretary, Treasurer, Recording Secretary and alumnus advisors.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of the Advisory Board Meeting is to keep the advisors informed of chapter activities, as well brainstorm ideas for improvement for the upcoming year. The most important part of the Advisory Board Meeting is to discuss the budget for the upcoming semester.

iii. Organization and Administration

The President organized the meeting by emailing all Advisory Board members. The meeting was held on ZOOM to allow all members of the advisory board to attend due to us being hit by a hurricane the next day. The meeting took place at 7:00 AM to accommodate everyone's schedule.

iv. Total Cost

\$0.0

v. **Cost Breakdown**

All Advisory Board members were required to attend. There was no cost associated with the meeting.

vi. **Special Problems Encountered**

None.

vii. **Overall Evaluation**

The meeting was a success. Advisors were informed about important upcoming dates and Annual Convention. Advisors provided excellent guidance and suggestions in regards to improving membership numbers and activity, fundraising, and corporate relations. We talked about questions the President had received already and came up with a plan to fix it.

2 Fall Officer Meeting #1

Florida Alpha

1. Project Information

i. Date(s): 09/08/23

ii. New/Recurring Project: New

iii. Project Areas:

- Custom
- Community/Liberal Culture
- University/College
- Profession/Engineering
- Chapter/Social
- Education/Professional Development
- K-12 STEM

iv. Number of persons who participated:

Category	Count
Members	11
Electees	0

v. Average number of hours per person spent:

Participating	Organizing
2.0	1.0

2. Project Evaluation

i. General Description

During the first meeting, officers introduce themselves to the group. All officers are informed of upcoming events and given the opportunity to ask questions. New officers learn about the proper way to fill out project reports. The President informs officers about attendance expectations and guidelines. The Treasurer informs the officers of the financial standing of the chapter.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

These meetings help officers stay aware of the expectations of the group, and answer any questions they may have. It also provides transparency to the officer group on the performance of the chapter.

iii. Organization and Administration

Officers were informed of the time and place of the meeting at the beginning of the semester. The President reserved rooms with the registrar for each of the officer meetings. Meetings are held at 7:00pm, the same time as normal general body meetings. The President prepared the agendas and PowerPoint slides for the meeting.

iv. Total Cost

\$0.0

v. **Cost Breakdown**

There were no costs associated with the meetings, as reserved classrooms are free for student groups. The President made a PowerPoint with the agenda. The recording secretary created a Google Form to take attendance. All officers were required to attend the meeting and sign in upon arrival.

vi. **Special Problems Encountered**

Due to delays from a hurricane, the envelopes for sending out the letters were not ready in time for this meeting so we could not pack them as a group, leading this to happen at a different time when not as many people could show up unfortunately.

vii. **Overall Evaluation**

The meeting was almost a success. Almost all of the officers were in attendance, and everyone was made aware of the expectations throughout semester. No letter packing so a pretty quick meeting.

3 Fall Member Meeting

Florida Alpha

1. Project Information

- i. Date(s): 09/11/23
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	46
Electees	0

- v. Average number of hours per person spent:

Participating	Organizing
2.0	1.0

2. Project Evaluation

- i. **General Description**

This was the first general body meeting of the semester where the officers explained plans for the semester to all of the members.
- ii. **Purpose and Relationship to Objectives of Tau Beta Pi**

The purpose of this meeting was to get all the members up to speed on the events that the officers have planned for the semester. Since it was the first meeting of the semester, all the officers introduced themselves to the members again. The meeting included information on the requirements to maintain active membership in Tau Beta Pi and how to get scholarships and fellowships from the organization.
- iii. **Organization and Administration**

The meeting was held in person and on Zoom. The PowerPoint was made in a Google Drive Document by the President and prior to the meeting, officers edited their slides. The recording secretary took minutes and sent them out after the meeting.
- iv. **Total Cost**

\$0.0
- v. **Cost Breakdown**

All members were strongly encouraged to attend

vi. **Special Problems Encountered**

None

vii. **Overall Evaluation**

The meeting was a success. Members were made aware of all of the upcoming events, and requirements to stay active with Tau Beta Pi.

4 Fall GBM #1

Florida Alpha

1. Project Information

- i. Date(s): 09/25/23
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	24
Electees	53

- v. Average number of hours per person spent:

Participating	Organizing
3.0	1.0

2. Project Evaluation

i. General Description

This was the first meeting of the semester with members and new candidates. Some information from the information sessions was repeated for candidates to remind them of their requirements for the semester to be eligible for initiation. The entire officer team introduced themselves, and the officers informed the members about upcoming events and scholarships to be aware of. Following the meeting was no pizza :(but about half of the people stayed around to chat for a couple minutes.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was to welcome new candidates to Tau Beta Pi and to inform members and candidates of the events coming up for the semester. The meeting also serves as a way for members and candidates to meet and become more familiar with one another. We hoped to convey how impressive it looks to be a member of Tau Beta Pi, and we hoped to convince candidates of how sociable and great the people in Tau Beta Pi are.

iii. Organization and Administration

The meeting was run by the officers. The President created the PowerPoint presentation and each officer was responsible for updating their own slides. The President created the sign in sheet.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

No cost

vi. **Special Problems Encountered**

None

vii. **Overall Evaluation**

The meeting successfully drew a large number of members and candidates. Some candidates stayed after the meeting to ask questions about Tau Beta Pi

5 Bowling Social

Florida Alpha

1. Project Information

i. Date(s): 09/27/23

ii. New/Recurring Project: New

iii. Project Areas:

- Custom
- Community/Liberal Culture
- University/College
- Profession/Engineering
- Chapter/Social
- Education/Professional Development
- K-12 STEM

iv. Number of persons who participated:

Category	Count
Members	4
Electees	14

v. Average number of hours per person spent:

Participating	Organizing
1.0	1.0

2. Project Evaluation

i. General Description

Candidates and members participated in a bowling event. There were 3 separate lanes with 6 people in each lane, allowing participants to socialize when it was not their turn to bowl. 2 lanes were reserved beforehand, and one more was purchased upon arriving to the alley. The event was held at the Reitz Union game room on campus.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The event was meant for new initiates to meet each other and learn more about the other events they will take part in at Tau Beta Pi. It also provided a chance for some members to meet each other and pass along their experiences to younger students while being in a fun environment.

iii. Organization and Administration

This event was planned by the social coordinator. Bowling lanes were reserved in advance and the person in charge of reservations was contacted about purchasing additional lanes upon arrival. An attendance survey was sent out beforehand as well to determine how many lanes would be needed.

iv. Total Cost

\$80.62

v. **Cost Breakdown**

Bowling Lanes (3): \$25 each + tax

vi. **Special Problems Encountered**

Lanes need to be reserved in advance in order to ensure that attendees will be able to partake. Changes that would have been made would have been to send out the attendance survey earlier so that all lanes could have been reserved ahead of time to avoid the risk of not having a lane for everyone. Additionally, it may have been possible to ask the staff at the front desk to stagger the start time for when the games began, as some late arrivals meant that not everyone was able to finish.

vii. **Overall Evaluation**

The experience was very good with attendees showing support for one another and having fun while still having time to talk and get to know one another better. There was also good attendance and enough lanes for everyone to participate. The only areas to improve upon would be earlier notice of potential attendance to ensure enough lanes were reserved, setting the games up to start when all members arrived to give more time, and perhaps giving an earlier arrival time to allow members time to get their shoes and check in to increase the amount of time for the social.

3. **Additional Attachments**

Figure 1:



Figure 2:



Figure 3:



Figure 4:



6 GatorTRAX: Electromagnets

Florida Alpha

1. Project Information

- i. Date(s): 09/30/23 - 10/14/23
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	2
Electees	17

- v. Average number of hours per person spent:

Participating	Organizing
12.0	3.0

2. Project Evaluation

i. General Description

This GatorTRAX event hosted 40 children and their parents to learn about electricity, magnetism, and how we can induce the latter from the former. To do this, we collaborated with the Eta Kappa Nu electrical engineering honor society to build a presentation and demonstration that children from ages 5 to 12 could find accessible and engaging. The lesson started with the concepts of like and opposite charges attracting and repelling, compared voltage imparting energy to a charge to raising an object's elevation and dropping it, and finished with the idea of moving charges creating a magnetic field in a dextral fashion. The demonstration had kids apply these ideas to create an electromagnetic by wrapping enameled copper wire around a galvanized iron nail. Once the children had created their magnets, they used them to pick up paper-cutout fish that had staples in their mouths.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This event provides kids an interactive way to learn concepts in physics and principles of engineering, as opposed to memorization without engagement. Moreover, we ensure they learn the intuition behind frequently misunderstood concepts, such as airfoils and electricity, without sacrificing accuracy.

iii. **Organization and Administration**

Kendall Lennon organized the volunteer & participant sign-ups while Joseph Arthur Conroy acquired the materials for the demonstration. Both Ms. Lennon & Mr. Conroy reserved rooms to prepare and conduct the demonstration. Mr. Matthew Herschfield of the Eta Kappa Nu electrical engineering honor society created and presented the lesson and demonstration on electromagnetism. 17 electee volunteers sat at each of the tables to ensure the safety of the children and guide the table's discussion towards deeper understanding of the material.

iv. **In Conjunction With**

Eta Kappa Nu Engineering Honor Society

v. **Total Cost**

\$56.38

vi. **Cost Breakdown**

26.38: 3 Packs of D Batteries

30.00: 2 lbs of galvanized nails

00.00: 17 Volunteers

Amazon failed to deliver \$95.55 worth of materials, including electrical tape, staples, and magnet wire.

vii. **Special Problems Encountered**

Amazon failed to deliver \$95.55 worth of materials, including electrical tape, staples, and magnet wire. Fortunately, Ms. Lennon's reputation with the UF faculty allowed her to borrow enameled wire, a wire sander, and staples for the demonstration while Mr. Conroy procured electrical tape. The event was able to run thanks to this contingency plan.

viii. **Overall Evaluation**

The event succeeded in teaching the children the basic idea of voltage imparting energy to charged particles by analogizing it to lifting an object to a higher height. The kids also learned about the right-hand circular magnetic field induced by a flowing current, and applied this idea in constructing their electromagnets. Though the event was educational, it proved shorter than expected. Once the kids had listened to the presentation, asked a few questions, answered a few more, and built their magnets, they picked up a few fish and left. In addition, the electrical tape did not mitigate the heat due to resistance as much as intended, causing us to require that the magnets not be run for a long duration. Overall, the event was a success, but the short duration and limited extensions on the project left us with a missed opportunity.

3. **Additional Attachments**

Figure 5: Flyer for our second autumn 2023 event



GatorTRAX

Electromagnetic Fishing

Fall 2023

Students will learn about electricity and magnetism and make their own electromagnets! We will provide DIY activity kits for each student.

Sign up will be sent to email list on Saturday, October 7th!

GatorTRAX is a **free K-12 math and engineering outreach program** that gives students the opportunities to learn about STEM through hands-on activities.

Date: October 14th
Location: Reitz Union
686 Museum Road
Room 2335
Time: 10:00 - 11:30 AM

Upcoming Events:
October 28th
November 11th

Parents will be required to stay with their student during the event. For more information or to be added to our email list please reach out to UFGatorTRAX@gmail.com

Figure 6: Presentation on electricity

Electromagnetic Fishing!

GatorTRAX 10/14/23



7 GatorTRAX: Gliders

Florida Alpha

1. Project Information

- i. Date(s): 09/30/23
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	2
Electees	8

- v. Average number of hours per person spent:

Participating	Organizing
2.4	3.0

2. Project Evaluation

i. General Description

We taught kids ranging from ages 5 to 12 the physical laws behind airplane wings by first building an intuition with how air flows. We then built balsa wood gliders & paper airplanes, discussed the reasons behind the shapes of various glider components, and compared the components of each of the flying devices. After discussing ideas like the dihedral angle for stability, winglets to reduce drag due to lift, horizontal stabilizers, and distributing weight on an aircraft, we went outside to launch our aircraft off the second floor of the student union. The scene detonated with excitement as we aerially bombarded the sidewalk beside the student union.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This demonstrates the mathematics and thought process behind physics and engineering in a way that is intuitive and tangible. Most pedagogy focuses on information flowing from instructor to pupil, which inculcates passivity in the student and rewards participation and disengagement just the same. This program rewards engagement with flying machines, electric motors, cars, and popsicle stick artillery to launch at your parents. Being able to design, build, and test something tangible connects effort and understanding to tangible rewards.

iii. **Organization and Administration**

We have two administrators for this program titled 'Vice-Presidents of Student Outreach'. Currently it contains two folks, Joseph Arthur Conroy and Kendall Lennon. Our jobs are to prepare the lectures, reserve rooms, create the projects, sign up parents, register our chapter with the University Ethics and Compliance Office, and coordinate with other groups when doing partner presentations.

iv. **Total Cost**

\$137.0

v. **Cost Breakdown**

\$137.00 - Materials for the project

\$00.00 -- Reserving rooms, margin for materials

\$0.00 ---- Volunteers from TBP. We require electees to have at least 3 volunteer hours with GatorTRAX at Florida Alpha

\$137.00

This is an estimate. The cost of each event fluctuates depending on the materials necessary for the demonstration.

vi. **Special Problems Encountered**

The University recently implemented stricter compliance standards for organizations dealing with children. It wasn't a problem to meet the new standards, it was just a lot of time and paperwork in a relatively new and thus relatively opaque bureaucratic pipeline.

The most significant engineering challenge is making the material intuitive to a child. It requires us to fully internalize the physical process of the systems we're covering beyond the equations.

vii. **Overall Evaluation**

Extremely successful! The kids were chomping at the bit to speculate on ability of an airplane wing to create lift and create wingtip vortices. With a few leading questions, we got them to come up with the correct flow-turning and pressure gradient answers themselves! Once we got into building paper airplanes and balsa gliders with different wing planforms, the room exploded with excitement. We marched them to a balcony on the student union to launch their flying machines, and the raucous joy was that of a Christmas morning.

We had 41 kids sign up with two no-shows. We got to the ring wing, the concept of drag due to lift, and the design of a wing planform but did not fully cover aspect ratio as the kids could no longer be stopped from throwing their crafts.

3. **Additional Attachments**

Figure 7: Flyer for our first Autumn 2023 event

 **Tau Beta Pi**
The Engineering Honor Society

GATORTRAX

BALSA WOOD GLIDERS

FALL 2023

Students will learn the science behind airplane wings and make their own gliders to demonstrate! We will provide DIY activity kits for each student. Sign up will be sent to email list on Saturday, September 23rd!

GatorTRAX is a **free K-12 math and engineering outreach program** that gives students the opportunities to learn about STEM through hands-on activities.

Date: September 30th
Location: Reitz Union
686 Museum Road
Room 2335
Time: 10:00 - 11:30 AM

Upcoming Events:
October 14th
October 28th
November 11th

Parents will be required to stay with their student during the event. For more information or to be added to our email list please reach out to UFGatorTRAX@gmail.com

Figure 8: Presentation I used (We got to the ring wing)



8 Trivia Night Social

Florida Alpha

1. Project Information

- i. Date(s): 10/09/23
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	7
Electees	20

- v. Average number of hours per person spent:

Participating	Organizing
2.0	1.0

2. Project Evaluation

i. General Description

Members and initiates formed teams and participated in a fun game of general trivia knowledge. The event was hosted immediately following GBM #2 in the same room, making it easy for participants to attend. 3 rounds of trivia questions were made ahead of time and Kahoot was the site used to create the quizzes.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The event was meant to provide a fun opportunity for initiates to get together and interact more with each other while competing in a team game.

iii. Organization and Administration

The event was planned and performed by the social coordinator. The quizzes were prepared using Kahoot and some questions were used from last year's trivia night social.

iv. Total Cost

\$0.0

v. Cost Breakdown

No costs were assigned to this event.

vi. **Special Problems Encountered**

It was not really an issue, but we had to be sure that we could extend the time for our reservation of the room for the GBM to ensure there were no conflicts with other activities.

vii. **Overall Evaluation**

The event had a very good turnout, hosting it after the GBM made it more likely for initiates to attend both activities. It seemed like participants were having a good time and enjoyed playing with one another. The only things I would change is to maybe include a section where participants could answer questions based on someone in their group, or have some more interaction time with their team members initially to get to know one another better, and include a prize for the winning team. Other than that, it was a successful event that did not have too much difficulty associated with it that I would recommend doing again.

3. **Additional Attachments**

Figure 9:



9 Fall GBM #2

Florida Alpha

1. Project Information

- i. Date(s): 10/09/23
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	30
Electees	51

- v. Average number of hours per person spent:

Participating	Organizing
3.0	1.0

2. Project Evaluation

i. General Description

This was the first meeting of the semester with members and new candidates. Some information from the information sessions was repeated for candidates to remind them of their requirements for the semester to be eligible for initiation. The entire officer team introduced themselves, and the officers informed the members about upcoming events and scholarships to be aware of. Following the meeting was trivia night which was a huge success as we had quite a lot of people in person for the event.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was to welcome new candidates to Tau Beta Pi and to inform members and candidates of the events coming up for the semester. The meeting also serves as a way for members and candidates to meet and become more familiar with one another. We hoped to convey how impressive it looks to be a member of Tau Beta Pi, and we hoped to convince candidates of how sociable and great the people in Tau Beta Pi are.

iii. Organization and Administration

The meeting was run by the officers. The President created the PowerPoint presentation and each officer was responsible for updating their own slides. The President created the sign in sheet.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

No cost

vi. **Special Problems Encountered**

None

vii. **Overall Evaluation**

The meeting successfully drew a large number of members and candidates. Some candidates stayed after the meeting for the social.

10 TBP National Convention

Florida Alpha

1. Project Information

- i. Date(s): 10/12/23 - 10/15/23
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	1
Electees	0

- v. Average number of hours per person spent:

Participating	Organizing
3.0	42.0

2. Project Evaluation

i. General Description

The president from our chapter went to Atlanta to attend the 2023 TBP National Convention. He attended all 3 days of events, learning more about TBP, socializing with other chapters, and serving on the Constitution and Bylaws committees to make decisions about the future of TBP. He also met the district directors and learned about hosting EFutures events in-person in the future.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of convention was to support HQ, get to know other Tau Bates, and decide on motions that will impact the way TBP operates. Meeting with other Tau Bates supports chapter development as we learned different strategies from other officers and formed new ideas through the collaboration. Committee work helps divide the research and presentation among many people so the executive committee isn't overwhelmed. Finally all the business meetings allowed voting delegates to make decisions impacting the present and future state of our organization

iii. Organization and Administration

Convention was organized by GA-A and the Atlanta alumni chapter. Travel was planned on the presidents own and reimbursed from HQ. Outside planning for time off work/school and other personal issues were also arranged individually.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

The voting delegate's expenses were paid by HQ.

vi. **Special Problems Encountered**

Went as smooth as it could!

vii. **Overall Evaluation**

The convention was a success. The president learned a ton of information and met many people to make connections within TBP. Our chapter also won two awards: Chapter Project 2022-2023 and Chapter Excellence 2022-2023!

11 GatorTRAX: Catapults and Energy

Florida Alpha

1. Project Information

- i. Date(s): 10/14/23 - 10/28/23
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	1
Electees	16

- v. Average number of hours per person spent:

Participating	Organizing
1.0	3.0

2. Project Evaluation

i. General Description

As part of our chapter's ongoing series of education events, we hosted a lesson and activity for 41 kids from kindergarten to middle school to learn about the conservation of energy and apply it by building catapults, cotton-ball launchers, and trebuchets out of popsicle sticks, rubber bands, tape, magnets, spoons, and sticks. We began with a brief lesson discussing the definition of energy, the notion of its conservation, and the ways in which built systems store and release energy to do useful work. Tau Beta Pi volunteers then guided their tables through the process of building three devices of increasing complexity to demonstrate how storing and releasing energy in the arm of a catapult, the rubber bands of a cotton ball launcher, and the gravitational potential of a trebuchet's counterweight can allow us to hurl various erasers, cotton balls, and blocks across the room.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This event provides an accurate description of the conservation of energy that is accessible to young children and provides them a tangible example of this principle at work. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.

iii. **Organization and Administration**

Joseph Arthur Conroy handled the marketing, participant sign-ups, materials purchasing, volunteer sign-ups, delegation, the lesson plan, and the lesson presentation. Over twenty Tau Beta Pi volunteers put together the purchased materials into kits for each child. Sixteen Tau Beta Pi volunteers set up and cleaned up the Saturday morning event.

iv. **Total Cost**

\$81.21

v. **Cost Breakdown**

81.21: Cardboard tubes for the cotton ball launchers

00.00: Other supplies were taken from the surplus available from years of previous events

vi. **Special Problems Encountered**

I was quite ambitious with the quantity and complexity of assembly tasks in this lesson, so the number of materials necessary for each kit required over twenty volunteers to configure, and each table had to have a Tau Beta Pi engineer to walk the children through the event. Fortunately, the incoming cohort is quite large this year, so we had sufficient manpower to accomplish this.

vii. **Overall Evaluation**

The event was a roaring success. The kids' contributions during the discussion indicated they understood the scientific principles, and they were thrilled to build and fire their own toys. Thanks to the large amount of volunteers and the packing of only soft and light ammunition, the event had no accidents or injuries.

3. **Additional Attachments**

Figure 10: Flyer for our third autumn event

GATORTRAX
Catapults & Energy
Fall 2023

Students will learn the principles of potential & kinetic energy and apply them by building homemade catapults. We will provide DIY activity kits for each student. Sign-ups will be sent to the email list on Saturday October 21st.

Saturday, October 28th
10:00 to 11:30 am
Reitz Union, Arredondo Cafe

Parents will be required to stay with their child during the event. For more information or to be added to our email list, contact ufgatortrax@gmail.com.

GatorTRAX is a free K-12 math and engineering outreach program that gives students the opportunities to learn about STEM through hands-on activities.

Upcoming Events
November 11th

 **Tau Beta Pi**
The Engineering Honor Society

Figure 11: Presentation from which I taught (We finished all three builds)

Volunteer Sign-In



<https://forms.gle/h65jiyZU9WWW5aLY8>

Thank you for helping!

12 Volleyball Social

Florida Alpha

1. Project Information

i. Date(s): 10/19/23

ii. New/Recurring Project: New

iii. Project Areas:

- Custom
- Community/Liberal Culture
- University/College
- Profession/Engineering
- Chapter/Social
- Education/Professional Development
- K-12 STEM

iv. Number of persons who participated:

Category	Count
Members	3
Electees	13

v. Average number of hours per person spent:

Participating	Organizing
2.0	1.0

2. Project Evaluation

i. General Description

Initiates and members participated in a few fun volleyball games on the sand courts at one of the student recreation centers. The event started with a large game, but eventually, when enough members had arrived, we made three teams and played short games where the winning team stayed on.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The event was meant to provide a fun opportunity for initiates to get together, interact with one another, and learn more about each other while competing in a team game.

iii. Organization and Administration

The event was planned and performed by the social coordinator. Originally tried to reserve the courts, but finding difficulty there switched to finding out a time when the club teams would be leaving so that a court could be used immediately after.

iv. Total Cost

\$0.0

v. Cost Breakdown

N/A

vi. **Special Problems Encountered**

Trying to reserve a volleyball court was extremely difficult. In the future, it would be recommended to go at less popular hours when it is easier to get a court without a reservation, or start working on getting a reservation a month or more in advance.

vii. **Overall Evaluation**

The volleyball social was very successful overall. Many members stayed past the planned time for the event and gained more confidence in speaking with others and playing as the games went on. Making smaller teams that played round-robin style where the winner stayed on was very useful as it allowed more players to have a chance to be involved in the team, and gave the team sitting out a better chance to talk with one another. The event is strongly recommended for the future. The only thing to change would be to get a court reservation to make sure that participants can play and so the event can start at an earlier hour as many participants continued the event past the originally set hours.

3. **Additional Attachments**

Figure 12:



Figure 13:



13 Fall GBM #3

Florida Alpha

1. Project Information

- i. Date(s): 10/23/23
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	21
Electees	41

- v. Average number of hours per person spent:

Participating	Organizing
3.0	1.0

2. Project Evaluation

i. General Description

This was the first meeting of the semester with members and new candidates. Some information from the information sessions was repeated for candidates to remind them of their requirements for the semester to be eligible for initiation. The entire officer team introduced themselves, and the officers informed the members about upcoming events and scholarships to be aware of. Following the meeting was a fundraiser that was encouraged for people to attend.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was to welcome new candidates to Tau Beta Pi and to inform members and candidates of the events coming up for the semester. The meeting also serves as a way for members and candidates to meet and become more familiar with one another. We hoped to convey how impressive it looks to be a member of Tau Beta Pi, and we hoped to convince candidates of how sociable and great the people in Tau Beta Pi are.

iii. Organization and Administration

The meeting was run by the officers. The President created the PowerPoint presentation and each officer was responsible for updating their own slides. The President created the sign in sheet.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

No cost

vi. **Special Problems Encountered**

None

vii. **Overall Evaluation**

The meeting successfully drew a large number of members and candidates. Wasnt a huge turnout, but we didnt have anything afterword and it was only 2 weeks after the previous GBM.

14 GatorTRAX: Homopolar Motors

Florida Alpha

1. Project Information

- i. Date(s): 10/28/23 - 11/11/23
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	2
Electees	16

- v. Average number of hours per person spent:

Participating	Organizing
1.0	3.0

2. Project Evaluation

i. General Description

As part of our chapter's ongoing series of education events, we hosted a lesson and activity for 40 kids from kindergarten to middle school to learn about electromagnetism and apply it by building homopolar motors out of wire, AA batteries, and magnets. We began with a brief lesson discussing the concept of charge, the notion of a moving charge, how voltage pushes charges to move, creating current. Tau Beta Pi volunteers then guided their tables through the process of building motors that caused their wires to spin around the battery and caused nails to spin along their axes.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This event provides a basic yet accurate description of how a circuit works that is accessible to young children. The building project provides them a tangible example of this principle at work. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.

iii. Organization and Administration

Joseph Arthur Conroy handled the materials purchasing, volunteer sign-ups, delegation, the lesson plan, and the lesson presentation. Kendall Lennon handled the marketing and sign-ups. Fourteen Tau Beta Pi volunteers put together the purchased materials into kits for each child. Fifteen Tau Beta Pi volunteers set up and cleaned up the Saturday morning event.

iv. **Total Cost**

\$171.82

v. **Cost Breakdown**

8.19 Nails

21.99 Copper wire

15.44 AA batteries

109.99 Neodymium magnets: The magnets I initially purchased turned out to be quite small, so I purchased different ones rather than risk a choking hazard.

vi. **Special Problems Encountered**

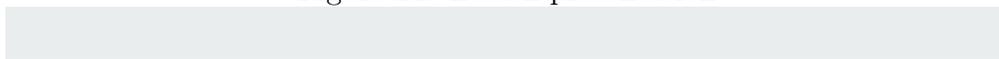
The magnets I initially purchased were too small, and a subset of the replacement magnets I purchased were ceramic, not metallic, and thus did not form a complete circuit. This caused frustration among some participants which I had to diffuse by wrangling everyone's attention and explaining that you now had to place at least one neodymium magnet adjacent to the battery to connect the terminals.

vii. **Overall Evaluation**

The event went decently well in terms of organization, and the material was succinct without sacrificing accuracy, but I fear the kids learned little more than 'electricity makes metal things move'. If I were to run the event again, I would develop a more tangible example of what electric and magnetic fields are, potentially using magnetic dust to show the fields of the magnets used.

3. **Additional Attachments**

Figure 14: Lesson presentation



Participants Please Sign In



15 Street Clean-Up #3

Florida Alpha

1. Project Information

- i. Date(s): 10/29/23
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	3
Electees	15

- v. Average number of hours per person spent:

Participating	Organizing
0.5	3.0

2. Project Evaluation

i. General Description

Our chapter has adopted a street and is committed to its cleaning maintenance at least six times throughout the year. Adopting a street is a great way to help beautify our community and show our civic pride. Also, seeing volunteers at work is a visible reminder to others that littering is not okay. Participants meet at our two-mile section of road and collect litter for three hours or until the road is completely clean.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

As engineers, we strive to make the world a better place through skills and also through service. Through service projects, like the street clean-up, our members have the opportunity to give back to and get involved with the Gainesville community outside of the University of Florida.

iii. Organization and Administration

This project was led by our chapter's service coordinators through the Gainesville Adopt-A-Street program. Coordinators were responsible for maintaining contact with the Gainesville Adopt-A-Street chair, picking up the clean-up kit the week previous to the event, coordinating the transport of participating members, leading the clean-up, and returning the clean-up kit after the event.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

No funds required for this event. The minimum participant requirement of four people was met.

vi. **Special Problems Encountered**

N/A

vii. **Overall Evaluation**

This was the third street clean-up of the semester, so both members and candidates participated. The turn-out for this event exceeded expectations, many candidates were eager to get involved with the chapter. Overall, it was a very smooth, successful event!

16 Halloween Social

Florida Alpha

1. Project Information

i. Date(s): 10/30/23

ii. New/Recurring Project: New

iii. Project Areas:

- Custom
- Community/Liberal Culture
- University/College
- Profession/Engineering
- Chapter/Social
- Education/Professional Development
- K-12 STEM

iv. Number of persons who participated:

Category	Count
Members	6
Electees	20

v. Average number of hours per person spent:

Participating	Organizing
3.0	1.0

2. Project Evaluation

i. General Description

Candidates and members met to decorate and eat some cookies while celebrating with holiday themes. Attendees also participated in some games and enjoyed eating candy that was not used for decorations.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The event was meant for new initiates to meet each other and learn more about the other events they will take part in at Tau Beta Pi. It also provided a chance for some members to meet each other and pass along their experiences to younger students while being in a fun environment.

iii. Organization and Administration

The event was planned and organized by the social coordinator. Cookies were made before the event (as there would not have been a way to make them at the event) and supplies were also purchased beforehand.

iv. Total Cost

\$160.0

v. Cost Breakdown

Costs were for the cookies, decorating materials, and candy used at the event.

vi. **Special Problems Encountered**

Reserving a room was difficult since food was being used, but there are plenty of rooms available in the building. So, an empty one was found just before the event, though this was not preferable as attendees were not given much notice of the change (though everyone seemed to arrive at the same place).

vii. **Overall Evaluation**

Overall the event was very successful. One attendee had useful input by starting a game of hangman that used words related to the holiday, which really helped others socialize with one another instead of just decorating by themselves. It may have been useful to get a better idea of the amount of supplies that were necessary beforehand, as there was excess but it allowed for attendees to work at their own pace. Event arrival time should have also been narrower as some attendees showed up towards the end of the event as others began to leave. Overall the event was very successful and the big takeaway for future events would be to add an additional fun game that allows for interaction among attendees.

3. **Additional Attachments**

Figure 15:



Figure 16:



17 GatorTRAX: Paper Buildings

Florida Alpha

1. Project Information

- i. Date(s): 11/11/23 - 11/25/23
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	2
Electees	12

- v. Average number of hours per person spent:

Participating	Organizing
1.0	3.0

2. Project Evaluation

i. General Description

As part of our chapter's ongoing series of education events, we hosted a lesson and activity for 40 kids from kindergarten to middle school to learn about structural statics by building paper towers. We began with a brief lesson discussing the in which structures direct forces to avoid collapse. The teams then used reams of construction paper, scissors, and tape to build a tower that could support a 13.5-ounce soup can for at least 1 minute.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This event connects civil engineering to a tangible project. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.

iii. Organization and Administration

Trevor DeLott created and presented the lesson plan. Kendall Lennon handled marketing and sign-ups. Joseph Arthur Conroy handled the materials purchasing and delegation to volunteers at the event. Thirteen Tau Beta Pi volunteers set up, guided, and cleaned up the Saturday morning event.

iv. Total Cost

\$120.0

v. **Cost Breakdown**

- 75.00 Approximate cost of forty scissors
- 25.00 Approximate cost of 528 sheets of construction paper
- 5.00 Approximate cost of 24 rulers
- 15.00 Approximate cost of ten 13.5 oz cans of spinach

vi. **Special Problems Encountered**

It turns out Powerpoint does not allow captions on embedded videos. This discovery arrived to my intense displeasure, as we have at least one hearing-impaired student.

vii. **Overall Evaluation**

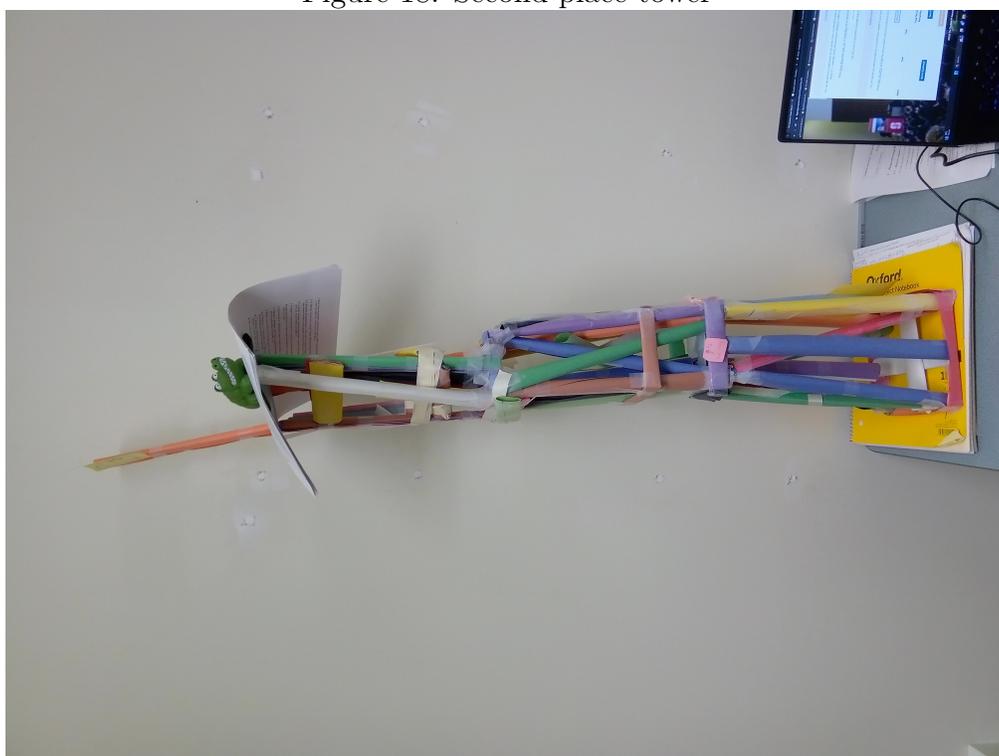
The event was an enormous success. It was the perfect way to gently introduce the notion of second moments of area, trusses, and static equilibrium without using any mathematical terms. The kids and parents alike had a blast making their structures, and 9/10 teams had their final towers support the soup can for the full minute.

3. **Additional Attachments**

Figure 17: Presentation explaining building integrity



Figure 18: Second-place tower



18 Fall GBM #4

Florida Alpha

1. Project Information

- i. Date(s): 11/13/23
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	21
Electees	25

- v. Average number of hours per person spent:

Participating	Organizing
3.0	1.0

2. Project Evaluation

i. General Description

This was the first meeting of the semester with members and new candidates. Some information from the information sessions was repeated for candidates to remind them of their requirements for the semester to be eligible for initiation. The entire officer team introduced themselves, and the officers informed the members about upcoming events and scholarships to be aware of. Following the meeting was no pizza :(but about half of the people stayed around to chat for a couple minutes.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was to welcome new candidates to Tau Beta Pi and to inform members and candidates of the events coming up for the semester. The meeting also serves as a way for members and candidates to meet and become more familiar with one another. We hoped to convey how impressive it looks to be a member of Tau Beta Pi, and we hoped to convince candidates of how sociable and great the people in Tau Beta Pi are.

iii. Organization and Administration

The meeting was run by the officers. The President created the PowerPoint presentation and each officer was responsible for updating their own slides. The President created the sign in sheet.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

No cost

vi. **Special Problems Encountered**

None

vii. **Overall Evaluation**

The meeting successfully drew a large number of members and candidates. Some candidates stayed after the meeting to ask questions about Tau Beta Pi

19 Bent Polishing Social

Florida Alpha

1. Project Information

i. Date(s): 11/14/23

ii. New/Recurring Project: New

iii. Project Areas:

- Custom
- Community/Liberal Culture
- University/College
- Profession/Engineering
- Chapter/Social
- Education/Professional Development
- K-12 STEM

iv. Number of persons who participated:

Category	Count
Members	6
Electees	11

v. Average number of hours per person spent:

Participating	Organizing
0.5	1.0

2. Project Evaluation

i. General Description

Candidates picked up their bents for initiation and polished them. Most candidates used sandpaper and we moved to some tools later on that were more effective, but we didn't have that many. Some candidates took polishing materials home as well to continue working on their bents before initiation. Some members also joined to polish their bents (this social had not been held during some previous semesters) and provide tips for candidates.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The event was meant for new initiates to meet each other and work on polishing their bent for the shiniest bent competition at initiation at the end of the week. It also provided a chance for some members to meet each other and pass along their experiences to younger students while being in a fun environment.

iii. Organization and Administration

The room was reserved by the TBP president, and the supplies were either ordered or leftover from previous semesters. The event was organized and managed by the social coordinator.

iv. Total Cost

\$0.0

v. **Cost Breakdown**

N/A

vi. **Special Problems Encountered**

Some difficulty reserving a room, but the time was adjusted and materials were brought to try to keep the room from getting too messy.

vii. **Overall Evaluation**

The event ended up having a good turnout. In the future, I would have given more advance notice of the social and tried to have it a bit sooner, as well as been more strict on members who came ensuring that they brought their own bent to polish. The one other thing would be to create some sort of activity or find a way to make the event more interactive as a group to have candidates talk with one another more. Overall, the event was successful and is encouraged for future semesters.

3. **Additional Attachments**

Figure 19:



Figure 20:



20 GatorTRAX: Shorelines

Florida Alpha

1. Project Information

- i. Date(s): 01/13/24 - 01/27/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	11
Electees	0

- v. Average number of hours per person spent:

Participating	Organizing
1.0	3.0

2. Project Evaluation

i. General Description

As part of our chapter's ongoing series of education events, we hosted a lesson and activity for 40 kids from kindergarten to middle school to learn about erosion and shoreline preservation. We provided a brief lesson on the subject and delved into a project wherein the kids managed erosion of sand in containers by applying meshes, aquarium grasses, and rocks.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This event connects civil engineering to a tangible project. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.

iii. Organization and Administration

Jayla Kindelspire developed the lesson plan and project idea. Sofia Arvelos Rojas managed the volunteers at the event. Joseph Arthur Conroy managed the sign-ups, materials acquisition, space acquisition, and permitting.

iv. Total Cost

\$203.75

v. **Cost Breakdown**

10.99 Rocks
7.99 Grass
31.55 Plastic containers
4.88 Bags for rocks
14.99 Mesh
-4.80 random discount
14.21 Tax

203.75

vi. **Special Problems Encountered**

Joseph could not attend the event due to a funeral up North.

vii. **Overall Evaluation**

The kids enjoyed being able to play with tubs of water and sand. Jayla and Sofia's conduct ensured the children felt at ease, allowing them to better absorb the material.

21 GatorTRAX: Balloon Cars

Florida Alpha

1. Project Information

- i. Date(s): 01/27/24 - 02/10/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	5
Electees	4

- v. Average number of hours per person spent:

Participating	Organizing
1.0	3.0

2. Project Evaluation

- i. **General Description**

As part of our chapter's ongoing series of education events, we hosted a lesson and activity for 40 kids from kindergarten to middle school to learn about the conservation of momentum. We provided a brief lesson on the subject and delved into a project wherein the kids built balloon-powered cars out of bottles, balloons, tape, and bottle caps.
- ii. **Purpose and Relationship to Objectives of Tau Beta Pi**

This event connects civil engineering to a tangible project. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.
- iii. **Organization and Administration**

Sofia Arvelos Rojas managed the volunteers & signups. Joseph Arthur Conroy managed materials acquisition, space acquisition, and the lesson.
- iv. **Total Cost**

\$126.13
- v. **Cost Breakdown**

126.13: Foam wheels, straws, and balloons

vi. **Special Problems Encountered**

I expect conveying the conservation of momentum in intuitive terms to kindergarteners might be difficult for others.

vii. **Overall Evaluation**

The event was a success. The kids got the intuition for the conservation of momentum and its implication on equal & opposite forces. A few of them even stayed behind to modify & race their cars once the event was over.

3. **Additional Attachments**

Figure 21: Flyer



Figure 22: Lesson presentation



22 GatorTRAX: STEAM Night

Florida Alpha

1. Project Information

- i. Date(s): 01/27/24 - 03/28/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	3
Electees	1

- v. Average number of hours per person spent:

Participating	Organizing
3.5	3.0

2. Project Evaluation

- i. **General Description**

We volunteered at a local elementary school's STEAM night. We hosted a booth teaching inclusive design for folks missing limbs. Kids built me a coffee mug that I could use to hold a mug of rocks without spilling with a hand balled into a fist inside a sock, and Sophia guided folks through building legos with one arm. We provided playdough for prototyping.
- ii. **Purpose and Relationship to Objectives of Tau Beta Pi**

This event connects civil engineering to a tangible project. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.
- iii. **Organization and Administration**

Sophia Arvelos Rojas managed the permitting, volunteers, lesson plan, materials acquisition, and transportation.
- iv. **In Conjunction With**

GRIP
- v. **Total Cost**

\$100.0

vi. **Cost Breakdown**

\$10.00 Pipe cleaners

\$10.00 Cups

\$10.00 Playdough

\$70.00 Legos

vii. **Special Problems Encountered**

The school got back to Sophia the night before the event with a surprise registration for volunteers. Fortunately, everyone was on the ball and completed the forms, but that was unnecessary stress to place on her.

viii. **Overall Evaluation**

It was a good event. The kids really liked having a clear and tangible design challenge then being given a set of materials with which to solve it.

23 GatorTRAX: Design & Circuitry

Florida Alpha

1. Project Information

- i. Date(s): 02/03/24 - 02/12/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM

- iv. Number of persons who participated:

Category	Count
Members	1
Electees	2

- v. Average number of hours per person spent:

Participating	Organizing
3.5	3.0

2. Project Evaluation

i. General Description

We hosted a bonus GatorTRAX event covering modular design using electrical engineering as an example. This came as part of a request by a local cub scout troop to obtain merit badges in engineering.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This event connects civil engineering to a tangible project. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.

iii. Organization and Administration

Joseph Arthur Conroy managed materials acquisition, space acquisition, and the lesson.

iv. Total Cost

\$1000.26

v. Cost Breakdown

\$1,000.26: 18 Drawable circuit kits

vi. Special Problems Encountered

Sofia had an emergency and could not make it. Half the volunteers got sick. The pens required you to stab the table to get them to work. Some kids started losing patience. We rallied and came away with a decent event, but it was war out there.

vii. **Overall Evaluation**

We succeeded in conveying the notion of charge, voltage, resistance, and current, as well as electricity's tendency towards the path of least resistance. A few kids picked up on parallel and series circuit design as an extrapolation of these principles, and we guided the rest to find it. Frustrations with the pens coupled with the dearth of volunteers to knock the planned projects off the rails, but we recovered. A few kids asked to take home the kits, so I gave them the kits. They were sufficiently excited about experimenting to take the kits home, so the event was a success.

3. **Additional Attachments**

Figure 23: Lesson presentation



24 Spring GBM #1

Florida Alpha

1. Project Information

- i. Date(s): 02/05/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	37
Electees	19

- v. Average number of hours per person spent:

Participating	Organizing
2.0	1.0

2. Project Evaluation

i. General Description

This was the first meeting of the semester with members and new candidates. Some information from the information sessions was repeated for candidates to remind them of their requirements for the semester to be eligible for initiation. The entire officer team introduced themselves, and the officers informed the members about upcoming events and scholarships to be aware of.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was to welcome new candidates to Tau Beta Pi and to inform members and candidates of the events coming up for the semester. The meeting also serves as a way for members and candidates to meet and become more familiar with one another. We hoped to convey how impressive it looks to be a member of Tau Beta Pi, and we hoped to convince candidates of how sociable and great the people in Tau Beta Pi are.

iii. Organization and Administration

The meeting was run by the officers. The President created the PowerPoint presentation and each officer was responsible for updating their own slides. The President created the sign in sheet.

iv. Total Cost

\$0.0

v. **Cost Breakdown**

No cost

vi. **Special Problems Encountered**

None

vii. **Overall Evaluation**

The meeting successfully drew a large number of members and candidates. Some candidates stayed after the meeting to ask questions about Tau Beta Pi

25 Valentine's Day Social

Florida Alpha

1. Project Information

- i. Date(s): 02/13/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	4
Electees	3

- v. Average number of hours per person spent:

Participating	Organizing
2.5	1.5

2. Project Evaluation

i. General Description

The two social chairs decided this would be a low stress social to begin the semester with. A music playlist was created along with some ideas of crafts for participants to create cards for their family, friends, and/or loved ones. The intent of starting with a Valentine's Social, was to begin a relaxed and social atmosphere that familiarizes Tau Beta Pi (TBP) members and candidates with one another, and offers fun and interactive activities to participants. Members and electees participated in Valentine's Trivia created by the two social chairs, shared some music preferences to add more supply to the social's music playlist, and refreshments were provided, such as pizza, cookies, and cupcakes. The last activity was creating Valentine's Day cards, where participants got creative with their words and crafts, in order to create meaningful messages and illustrations for card recipients. Overall, the Valentine's social was a success, everyone was well fed, super collaborative, and the atmosphere generated by the social chairs promoted a jubilant event.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was for newly initiated members and electees to meet each other and begin networking. Nametags and introductions were made so that participants of the social could become more familiar and comfortable talking to other members and candidates in Tau Beta Pi. By networking and socializing, the social chairs intend on furthering each member in TBP by challenging themselves to meet new people and try new/interactive activities.

iii. **Organization and Administration**

The social chairs split responsibilities concerning acquiring food and supplies. Activities for the social were also planned and discussed together. Alex Olson picked up the pizza.

iv. **Total Cost**

\$93.53

v. **Cost Breakdown**

Food costs were \$60.10, for pizza, cookies and cupcakes. Crafts supplies such as paper, tape, name tags, and markers totaled \$33.43.

vi. **Special Problems Encountered**

Before ordering pizza for the social, the social chairs were notified of a member who had a gluten-allergy. In response, an extra small gluten-free pizza was ordered in consideration of the member's allergies.

vii. **Overall Evaluation**

The Valentine's social was an overall success in starting a comfortable and social environment for TBP members and candidates to network and challenge themselves. The Valentine's card-based crafts resulted in a creative outlet for all participants, the music promoted a uplifting and relaxed atmosphere, and the food supplied was more than effective at satisfying every individual. Additionally, the Valentine's Trivia acted as a moderately competitive, educational, and fun way for members and candidates to interact. Since there was a decent excess of food supplied for this event, in future socials, less pizza (and any snacks) will be supplied with respect to the number of participants, and consideration of the semester budget. However, the social chairs worked well together in setting up the event and were pleased with how the social effectively hit their goals for the night. To get more participants for upcoming socials, the socials chair also intend on promoting the events in the Slack.

3. **Additional Attachments**

Figure 24:



Figure 25:



Figure 26:

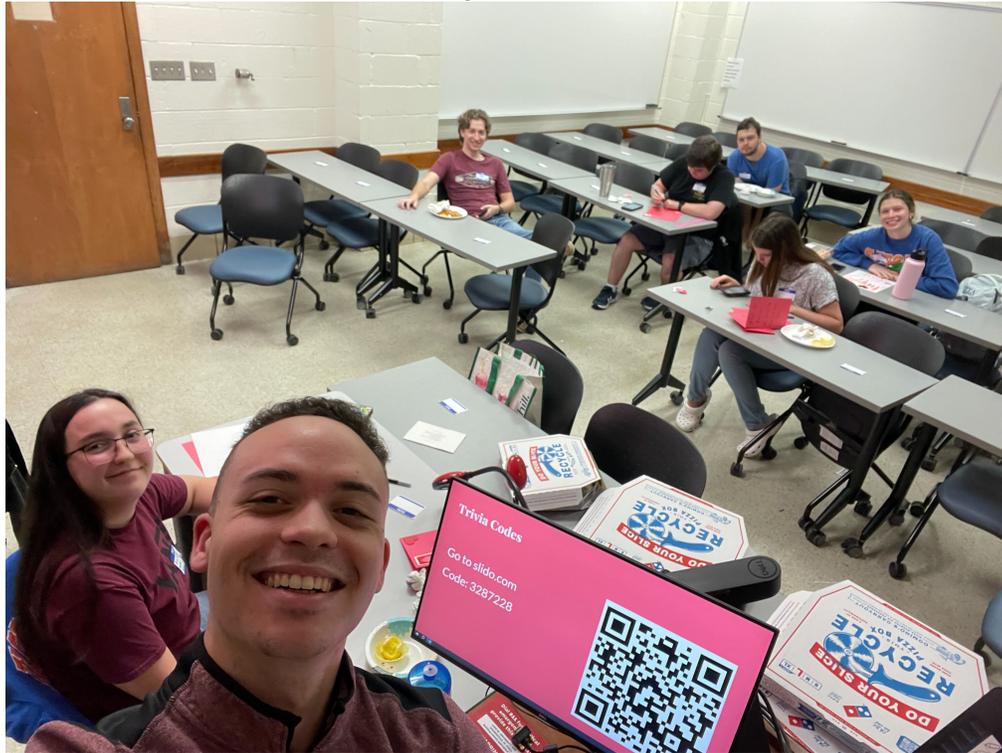


Figure 27:

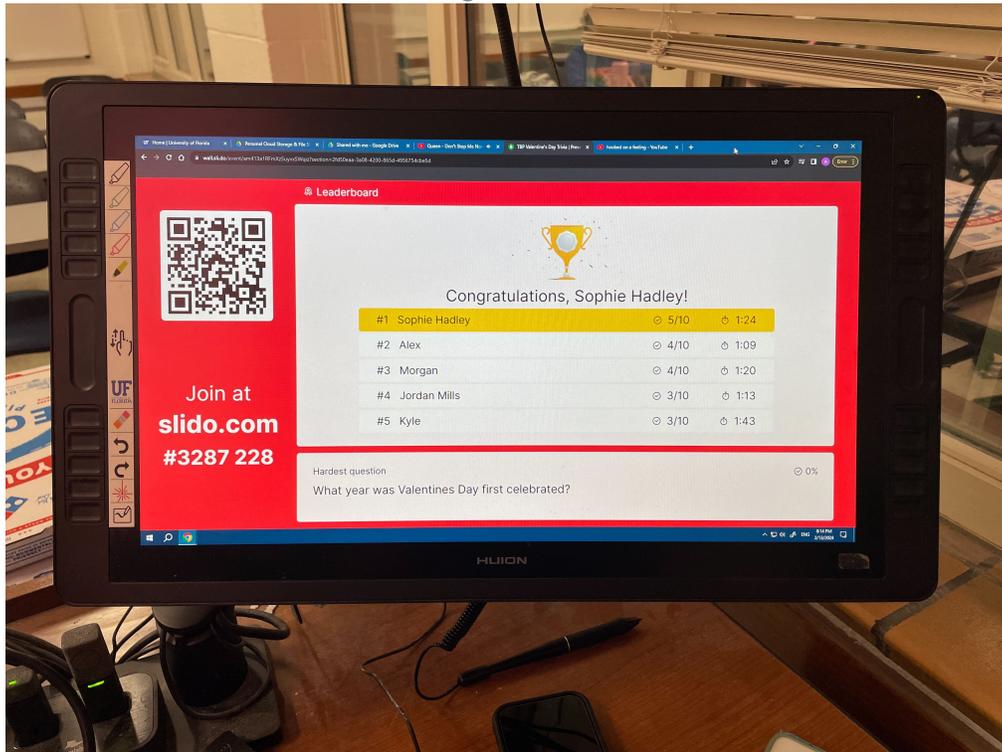


Figure 28:



26 Street Clean-Up #1

Florida Alpha

1. Project Information

- i. Date(s): 02/18/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	3
Electees	0

- v. Average number of hours per person spent:

Participating	Organizing
0.5	3.0

2. Project Evaluation

i. General Description

Our chapter has adopted a street and is committed to its cleaning maintenance at least six times throughout the year. Adopting a street is a great way to help beautify our community and show our civic pride. Also, seeing volunteers at work is a visible reminder to others that littering is not okay. Participants meet at our two-mile section of road and collect litter for three hours or until the road is completely clean.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

As engineers, we strive to make the world a better place through skills and also through service. Through service projects, like the street clean-up, our members have the opportunity to give back to and get involved with the Gainesville community outside of the University of Florida.

iii. Organization and Administration

This project was led by our chapter's service coordinators through the Gainesville Adopt-A-Street program. Coordinators were responsible for maintaining contact with the Gainesville Adopt-A-Street chair, picking up the clean-up kit the week previous to the event, coordinating the transport of participating members, leading the clean-up, and returning the clean-up kit after the event.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

No funds required for this event. The minimum participant requirement of four people was met.

vi. **Special Problems Encountered**

N/A

vii. **Overall Evaluation**

This was the third street clean-up of the semester, so both members and candidates participated. The turn-out for this event exceeded expectations, many candidates were eager to get involved with the chapter. Overall, it was a very smooth, successful event!

3. **Additional Attachments**

Figure 29:



27 UF Gymnastics Social

Florida Alpha

1. Project Information

- i. Date(s): 02/23/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	4
Electees	6

- v. Average number of hours per person spent:

Participating	Organizing
0.5	2.5

2. Project Evaluation

i. General Description

The two social chairs decided this would be a fun and educational social, exposing students to the physics of gymnastics during a UF event against LSU. The music playlist utilized for socials was developed, and participants got to network with other students and play interactive games, such as hangman. The intent of the Gymnastics Social, was to further familiarize Tau Beta Pi (TBP) members and candidates with one another, as well as offer fun and interactive activities to participants. Members and electees shared some music preferences to add more supply to the social's music playlist, refreshments were provided, such as pizza and water, then walked to the O'Connell Center to watch the Gymnastics event as a group. Overall, the Gymnastics social was a success, everyone was well fed, super collaborative, and the atmosphere generated by the social chairs, competitive UF team, and audience promoted a jubilant and excitable event.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was for newly initiated members and electees to meet each other and begin networking. Nametags were used so that participants of the social could become more familiar and comfortable talking to other members and candidates in Tau Beta Pi. By networking and socializing, the social chairs intend on furthering each member in TBP by challenging themselves to meet new people and try new/interactive activities. Additionally, the social chairs looked to manifest a fun and informative atmosphere by watching the biological mechanics of gymnastics.

iii. **Organization and Administration**

The social chairs split responsibilities concerning acquiring food, tickets, and seats. Activities for the social were also planned and discussed together.

iv. **Total Cost**

\$42.52

v. **Cost Breakdown**

Food costs were \$42.52 for pizza.

vi. **Special Problems Encountered**

No special problems occurred during the social.

vii. **Overall Evaluation**

The Gymnastics social was an overall success in creating an exciting and social environment for TBP members and candidates to network and learn an application of gymnastics with physics. The pre-game activities resulted in a comfortable atmosphere for networking, the music promoted a uplifting and relaxed atmosphere, and the food supplied was more then effective at satisfying every individual. Additionally, the UF Gymnastics competition acted as an educational, and fun way for members and candidates to interact and enjoy a UF based event. The pizza purchased was sufficient to the number of attendees, and was considerate of the semester budget. However, the social chairs worked well together in setting up the event and were pleased with how the social effectively hit their goals for the night. To get more participants for upcoming socials, the socials chair also intend on promoting the events in the Slack.

3. **Additional Attachments**

Figure 30:



Figure 31:



Figure 32:

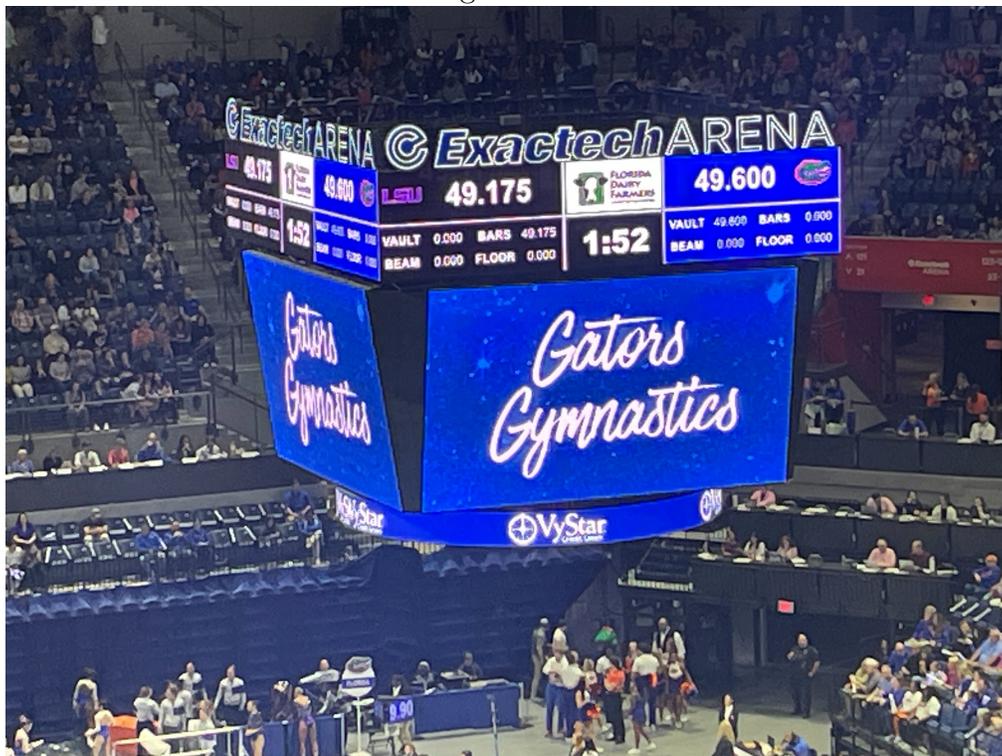
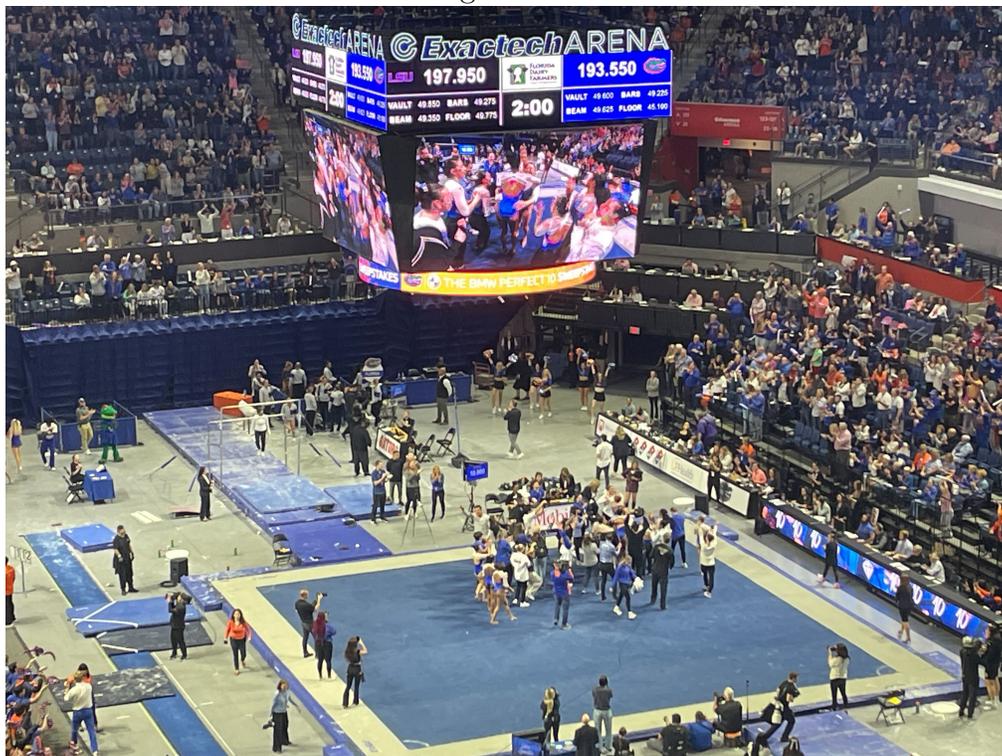


Figure 33:



Figure 34:



28 Great Invader Raider Rally

Florida Alpha

1. Project Information

- i. Date(s): 02/24/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	2
Electees	4

- v. Average number of hours per person spent:

Participating	Organizing
2.0	3.0

2. Project Evaluation

i. General Description

We participated in the Great Invader Raider Rally event hosted by the city of Gainesville. It was a one-day event to clean up the city's parks and natural areas as part of one of the largest invasive plant awareness events in the nation! During the Great Invader Raider Rally, we were assigned to Bivens Arm a city park where we removed invasive plants. This year we were supposed to focus on Coral Ardisia.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The event was used as a service opportunity for both candidates and members alike. We were able to work with other organizations like the city's master gardeners, cub scouts, and other groups for a common purpose.

iii. Organization and Administration

We registered for the event through the city of Gainesville. It was a very easy process, but we needed to know how many people to register before we had an accurate count. We went with 10 and that ended up being just fine. It was important to promote the event often so we had a good number of participants.

iv. In Conjunction With

The City of Gainesville

v. **Total Cost**

\$0.0

vi. **Cost Breakdown**

N/A

vii. **Special Problems Encountered**

We didn't have any.

viii. **Overall Evaluation**

The event went very well. We participated pulling many invasives out of our location. It was also a great opportunity to meet and make new friends with the candidates. Several members of the group even wanted to attend the 'after party' event hosted by the city park staff. We learned more about the organizations focused on protecting the Gainesville parks and really enjoyed spending time together afterwards. I would call that a success.

29 Great Invader Raider Rally

Florida Alpha

1. Project Information

- i. Date(s): 02/24/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	2
Electees	4

- v. Average number of hours per person spent:

Participating	Organizing
2.0	3.0

2. Project Evaluation

i. General Description

We participated in the Great Invader Raider Rally event hosted by the city of Gainesville. It was a one-day event to clean up the city's parks and natural areas as part of one of the largest invasive plant awareness events in the nation! During the Great Invader Raider Rally, we were assigned to Bivens Arm a city park where we removed invasive plants. This year we were supposed to focus on Coral Ardisia.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The event was used as a service opportunity for both candidates and members alike. We were able to work with other organizations like the city's master gardeners, cub scouts, and other groups for a common purpose.

iii. Organization and Administration

We registered for the event through the city of Gainesville. It was a very easy process, but we needed to know how many people to register before we had an accurate count. We went with 10 and that ended up being just fine. It was important to promote the event often so we had a good number of participants.

iv. In Conjunction With

The City of Gainesville

v. **Total Cost**

\$0.0

vi. **Cost Breakdown**

N/A

vii. **Special Problems Encountered**

Not particularly

viii. **Overall Evaluation**

The event went very well. We participated pulling many invasives out of our location. It was also a great opportunity to meet and make new friends with the candidates. Several members of the group even wanted to attend the 'after party' event hosted by the city park staff. We learned more about the organizations focused on protecting the Gainesville parks and really enjoyed spending time together afterwards. I would call that a success.

30 Spring GBM #2

Florida Alpha

1. Project Information

- i. Date(s): 02/26/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	40
Electees	14

- v. Average number of hours per person spent:

Participating	Organizing
2.0	1.0

2. Project Evaluation

i. General Description

This was the second meeting of the semester with members and new candidates. Some information from the information sessions was repeated for candidates to remind them of their requirements for the semester to be eligible for initiation. The officers informed the members about upcoming events and scholarships to be aware of.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was to welcome new candidates to Tau Beta Pi and to inform members and candidates of the events coming up for the semester. The meeting also serves as a way for members and candidates to meet and become more familiar with one another. We hoped to convey how impressive it looks to be a member of Tau Beta Pi, and we hoped to convince candidates of how sociable and great the people in Tau Beta Pi are.

iii. Organization and Administration

The meeting was run by the officers. The President created the PowerPoint presentation and each officer was responsible for updating their own slides. The President created the sign in sheet.

iv. Total Cost

\$0.0

v. **Cost Breakdown**

No cost

vi. **Special Problems Encountered**

None

vii. **Overall Evaluation**

The meeting successfully drew a large number of members and candidates. Some candidates stayed after the meeting to ask questions about Tau Beta Pi

31 Street Clean-Up #2

Florida Alpha

1. Project Information

- i. Date(s): 03/03/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	3
Electees	2

- v. Average number of hours per person spent:

Participating	Organizing
0.5	3.0

2. Project Evaluation

i. General Description

Our chapter has adopted a street and is committed to its cleaning maintenance at least six times throughout the year. Adopting a street is a great way to help beautify our community and show our civic pride. Also, seeing volunteers at work is a visible reminder to others that littering is not okay. Participants meet at our two-mile section of road and collect litter for three hours or until the road is completely clean.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

As engineers, we strive to make the world a better place through skills and also through service. Through service projects, like the street clean-up, our members have the opportunity to give back to and get involved with the Gainesville community outside of the University of Florida.

iii. Organization and Administration

This project was led by our chapter's service coordinators through the Gainesville Adopt-A-Street program. Coordinators were responsible for maintaining contact with the Gainesville Adopt-A-Street chair, picking up the clean-up kit the week previous to the event, coordinating the transport of participating members, leading the clean-up, and returning the clean-up kit after the event.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

No funds required for this event. The minimum participant requirement of four people was met.

vi. **Special Problems Encountered**

N/A

vii. **Overall Evaluation**

This was the second street clean-up of the semester, so both members and candidates participated. We had a better turnout than the first so we were happy! Overall, it was a very smooth, successful event!

32 GatorTRAX: Water Filters

Florida Alpha

1. Project Information

- i. Date(s): 03/09/24 - 03/23/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	5
Electees	6

- v. Average number of hours per person spent:

Participating	Organizing
1.0	3.0

2. Project Evaluation

- i. **General Description**

As part of our chapter's ongoing series of education events, we hosted a lesson and activity for 40 kids from kindergarten to middle school to learn about the engineering design process. Sophia provided a brief lesson on engineering design as applied to sandwichcraft and led the kids through a project building water filters out of bottles, rocks, sand, and carbon pellets.
- ii. **Purpose and Relationship to Objectives of Tau Beta Pi**

This event connects civil engineering to a tangible project. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.
- iii. **Organization and Administration**

Sofia Arvelos Rojas managed signups, the lesson plan, and materials acquisition. Joseph Arthur Conroy managed sign-ups and space acquisition.
- iv. **Total Cost**

\$90.0
- v. **Cost Breakdown**

20.00: Estimated cost of carbon pellets

20.00: Estimated cost of rocks
10.00: Estimated cost of sand
20.00: Estimated cost of shipping
20.00: Estimated cost of bottles

vi. **Special Problems Encountered**

The materials were messy and Sophia ended up handling most of the event by herself. Your Project Attachments cannot handle the lesson presentation. That is your loss.

vii. **Overall Evaluation**

The event was a success. The kids got into the interactive lesson and put together some decent filters for extracting dirt and dye. One group found that pouring dyed water onto paper towels allowed the capillary action of the water to strain it out of the dye.

33 GatorTRAX: Boats & Buoyancy

Florida Alpha

1. Project Information

- i. Date(s): 03/16/24 - 03/30/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	5
Electees	0

- v. Average number of hours per person spent:

Participating	Organizing
1.0	3.0

2. Project Evaluation

i. General Description

As part of our chapter's ongoing series of education events, we teamed up with the Chi Epsilon civil engineering honors society to create a lesson and activity for 40 kids from kindergarten to middle school to learn about the principles of buoyancy. We started with a few diagrams explaining Archimedes' principle of displacement before moving onto a building competition to see how many rocks each team could float on rafts of aluminum foil and cardboard. Along the way, I illustrated Archimedes' principle by having kids push down on their boats to feel the resistance.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This event connects civil engineering to a tangible project. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.

iii. Organization and Administration

Trevor DeLotte managed the lesson plan. Sofia Arvelos Rojas managed the volunteers. Joseph Arthur Conroy managed materials acquisition and space acquisition.

iv. In Conjunction With

v. **Total Cost**

\$104.0

vi. **Cost Breakdown**

104: Cardboard, rulers, scissors, and aluminum foil.

vii. **Special Problems Encountered**

Don't tell Trevor this, but the presentation wasn't that great. Fortunately, his building project was phenomenal, so it was really easy to tell the kids to push their boats down in the water, see the water level rise, and explain how the weight of the water trying to flow back in was causing buoyancy.

viii. **Overall Evaluation**

The event was a success. Trevor has a knack for awesome building projects, so it was really easy to tell the kids to push their boats down in the water, see the water level rise, and explain how the weight of the water trying to flow back in was causing buoyancy. One kid floated 293 rocks in her raft. Another kid had a very buoyant flat-bottom design that tended to flip over, so we learned about stability via out-riggers & v-hulls.

3. **Additional Attachments**

Figure 35: Lesson Presentation



34 GatorTRAX: Prosthetics

Florida Alpha

1. Project Information

- i. Date(s): 03/16/24 - 04/06/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	4
Electees	3

- v. Average number of hours per person spent:

Participating	Organizing
3.5	3.0

2. Project Evaluation

i. General Description

As part of our ongoing GatorTRAX outreach, guided students through three building projects based on accessible design. Kids built me a coffee mug that I could use to hold a mug of rocks without spilling with a hand balled into a fist inside a sock, Sophia guided folks through building legos with one arm, and we invited a biomedical engineering organization to bring prosthetic arms for the kids to string.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This event connects engineering to a tangible project that demonstrates how our work personally affects people. Such an opportunity to learn and apply core engineering principles is rare in K-12 education and constitutes a service that Tau Beta Pi is uniquely equipped to give to the community.

iii. Organization and Administration

Sophia Arvelos Rojas managed the lesson plan, materials acquisition, and transportation. Joseph Arthur Conroy managed the permitting & volunteers

iv. In Conjunction With GRIP

v. **Total Cost**

\$100.0

vi. **Cost Breakdown**

\$10.00 Pipe cleaners

\$10.00 Cups

\$10.00 Playdough

\$70.00 Legos

vii. **Special Problems Encountered**

Some of the volunteers had trouble speaking with the kids. We gave a small lesson to the volunteers about making the goal of each project clear with demonstration rather than reticent lectures.

viii. **Overall Evaluation**

The events effectively demonstrated the utility in inclusive design while allowing the kids to exercise creativity by building physical objects. The kids really liked having a clear and tangible design challenge then being given a set of materials with which to solve it.

3. **Additional Attachments**

Figure 36: Lesson presentation

PARTICIPANT SIGN IN



Figure 37: Event flyer

Tau Beta Pi
The Engineering Honor Society
Florida Alpha

GRIP

TAU BETA PI & GRIP

GATORTRAX PROSTHETICS

STUDENTS WILL LEARN ABOUT HUMAN-CENTERED ENGINEERING DESIGN WHILE PARTICIPATING IN VARIOUS HANDS ON ACTIVITIES!

GATORTRAX IS A FREE K-12 MATH AND ENGINEERING OUTREACH PROGRAM THAT GIVES STUDENTS THE OPPORTUNITY TO LEARN ABOUT STEM THROUGH HANDS-ON ACTIVITIES

**LOCATION: REITZ UNION
686 MUSEUM ROAD
ARREDONDO CAFE (4TH FLOOR)**

**DATE: APRIL 6TH
TIME: 10:00 - 11:30 AM**

PARENTS WILL BE REQUIRED TO STAY WITH THEIR STUDENT DURING THE EVENT. FOR MORE INFORMATION OR TO BE ADDED TO OUR EMAIL LIST PLEASE REACH OUT TO UFGATORTRAX@GMAIL.COM

35 Bowling Social

Florida Alpha

1. Project Information

- i. Date(s): 03/20/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	5
Electees	3

- v. Average number of hours per person spent:

Participating	Organizing
1.0	1.0

2. Project Evaluation

- i. **General Description**

Candidates and members participated in a bowling event. There were 2 separate lanes with up to 6 people in each lane, allowing participants to socialize when it was not their turn to bowl. Two lanes were reserved beforehand. The event was held at the Reitz Union game room on campus.
- ii. **Purpose and Relationship to Objectives of Tau Beta Pi**

The event was meant for new initiates to meet each other and learn more about the other events they will take part in at Tau Beta Pi. It also provided a chance for some members to meet each other and pass along their experiences to younger students while being in a fun environment.
- iii. **Organization and Administration**

This event was planned by the social coordinators. Bowling lanes were reserved in advance and the person in charge of reservations was contacted about purchasing additional lanes upon arrival in the case of a higher attendance.
- iv. **Total Cost**

\$53.25
- v. **Cost Breakdown**

Bowling Lanes (2): \$25 each + tax

vi. **Special Problems Encountered**

Lanes need to be reserved in advance in order to ensure that attendees will be able to partake. Additionally, it may have been possible to ask the staff at the front desk to stagger the start time for when the games began, as some late arrivals meant that not everyone was able to finish. The coordinators also were unaware that the time was based on when the reservation was checked rather than when the first ball was sent down. This reduced the total bowling time.

vii. **Overall Evaluation**

The experience was very good with attendees showing support for one another and having fun while still having time to talk and get to know one another better. There was also good attendance and enough lanes for everyone to participate. The only areas to improve upon giving an earlier arrival time to allow members time to get their shoes and check in to increase the amount of time for the social.

3. **Additional Attachments**

Figure 38:



Figure 39:

	1	2	3	4	5	6	7	8	9	10	0:17
Aris	--	3 6	9 -	X	9 -	- -	7 1	9 -	7 1	- -	
A Aaron	⑦ 1	6 3	15 3 1	X	7 -	1 3	9 /	X	10 2		
Patty	3 -	7 /	X -	9 -	X -	8 1 8	8 -	5 -	9 / 8		
Landon	9 -	5 -	6 -	3 /	7 -	3 4	1 5	8 -	2 4 3 4		
	0	9	18	37	46	54	63	71	71	71	
	8	17	23	27	44	51	55	75	94	103	103
	3	23	42	51	69	77	86	94	99	117	117
	9	14	20	37	44	51	57	65	71	78	78

Figure 40:



36 Spring GBM #3

Florida Alpha

1. Project Information

- i. Date(s): 03/25/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	54
Electees	11

- v. Average number of hours per person spent:

Participating	Organizing
2.0	1.0

2. Project Evaluation

i. General Description

This was the third meeting of the semester with members and new candidates. Some information from the information sessions was repeated for candidates to remind them of their requirements for the semester to be eligible for initiation. The officers informed the members about upcoming events and scholarships to be aware of.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was to welcome new candidates to Tau Beta Pi and to inform members and candidates of the events coming up for the semester. The meeting also serves as a way for members and candidates to meet and become more familiar with one another. We hoped to convey how impressive it looks to be a member of Tau Beta Pi, and we hoped to convince candidates of how sociable and great the people in Tau Beta Pi are.

iii. Organization and Administration

The meeting was run by the officers. The President created the PowerPoint presentation and each officer was responsible for updating their own slides. The President created the sign in sheet.

iv. Total Cost

\$0.0

v. **Cost Breakdown**

No cost

vi. **Special Problems Encountered**

None

vii. **Overall Evaluation**

The meeting successfully drew a large number of members and candidates. Very good turnout for the later GBMS and the people that attended in person had a lot of conversations afterward. Solid GBM.

37 Pi Day Party

Florida Alpha

1. Project Information

- i. Date(s): 03/25/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	15
Electees	8

- v. Average number of hours per person spent:

Participating	Organizing
1.0	0.5

2. Project Evaluation

- i. **General Description**

Members and candidates joined in a belated celebration of Pi Day, where pie and beverages were served. A contest was held for candidates to memorize the most digits of the number pi.
- ii. **Purpose and Relationship to Objectives of Tau Beta Pi**

The social event served to enhance camaraderie among new and current members through a relaxed social gathering and a friendly, engineering-related competitive event.
- iii. **Organization and Administration**

Eddie Beck did the majority of the planning and obtained all supplies. Karthik Boregowda jointly hosted the event with Eddie. The event was slightly delayed and shortened due to a delay in gathering all needed supplies.
- iv. **Total Cost**

\$30.0
- v. **Cost Breakdown**

The full budget was spent on food and drinks. The budget and personnel were sufficient for the event.
- vi. **Special Problems Encountered**

N/A

vii. **Overall Evaluation**

The project succeeded in fostering friendly competition, conversation, and interaction among members and candidates of the chapter. In the future, a longer event duration and wider array of activities could enhance the experience for participants, as the event was somewhat rushed due to timing delays and some participants chose not to compete in the pi memorization contest.

38 Spring GBM #4

Florida Alpha

1. Project Information

- i. Date(s): 04/08/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	36
Electees	3

- v. Average number of hours per person spent:

Participating	Organizing
2.0	1.0

2. Project Evaluation

i. General Description

This was the fourth meeting of the semester with members and new candidates. Some information from the information sessions was repeated for candidates to remind them of their requirements for the semester to be eligible for initiation. The officers informed the members about upcoming events and scholarships to be aware of.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

The purpose of this event was to welcome new candidates to Tau Beta Pi and to inform members and candidates of the events coming up for the semester. The meeting also serves as a way for members and candidates to meet and become more familiar with one another. We hoped to convey how impressive it looks to be a member of Tau Beta Pi, and we hoped to convince candidates of how sociable and great the people in Tau Beta Pi are.

iii. Organization and Administration

The meeting was run by the officers. The President created the PowerPoint presentation and each officer was responsible for updating their own slides. The President created the sign in sheet.

iv. Total Cost

\$0.0

v. **Cost Breakdown**

No cost

vi. **Special Problems Encountered**

None

vii. **Overall Evaluation**

The meeting successfully drew a large number of members and candidates. Very low turnout for candidates which is interesting but still a decent amount of people showed up.

39 Bent Polishing Social

Florida Alpha

1. Project Information

- i. Date(s): 04/12/24
- ii. New/Recurring Project: New
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	2
Electees	0

- v. Average number of hours per person spent:

Participating	Organizing
0.5	1.0

2. Project Evaluation

- i. **General Description**

The intentions of this event were for candidates to pick up their bents for initiation and polished them. Attendees were provided with N95 masks to protect them against the particles. Additional supplies such as sandpaper were utilized for the polishing efforts.
- ii. **Purpose and Relationship to Objectives of Tau Beta Pi**

The event was meant for new initiates to meet each other and work on polishing their bent for the shiniest bent competition at initiation at the end of the week.
- iii. **Organization and Administration**

The room was reserved by the TBP president, and the supplies were either ordered or leftover from previous semesters. The event was organized and managed by the social coordinator.
- iv. **Total Cost**

\$69.49
- v. **Cost Breakdown**

Pizza - \$37.52
Masks - \$31.97
- vi. **Special Problems Encountered**

There were less attendees than expected.

vii. **Overall Evaluation**

There were more opportunities this semester for people to get their social points. This led to a lower attendance per event.

3. **Additional Attachments**

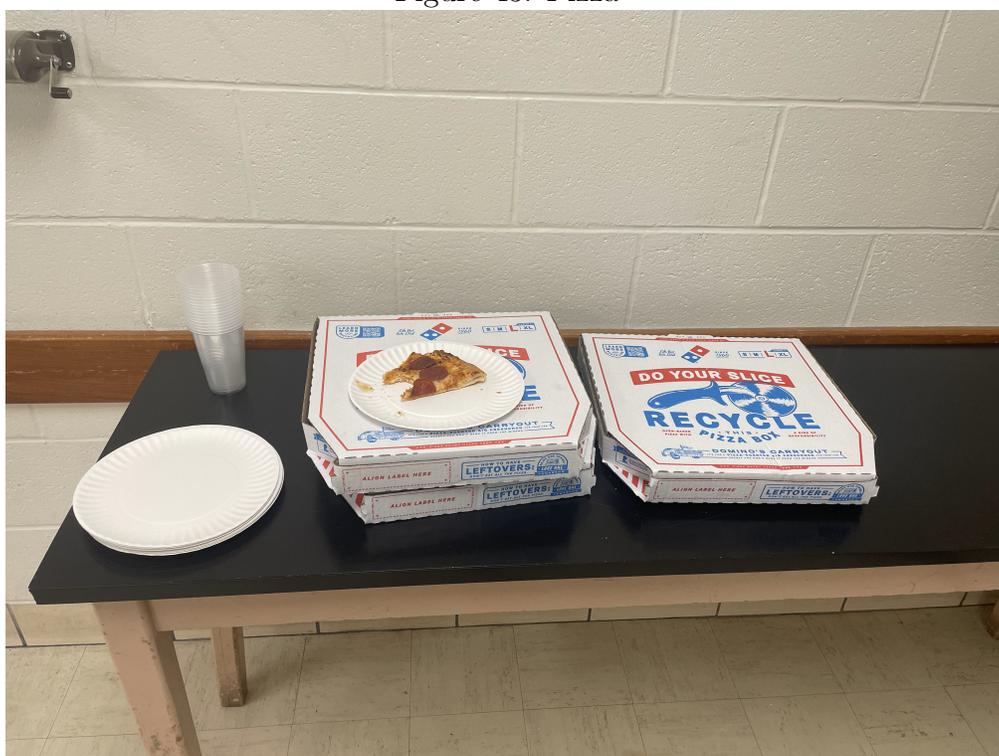
Figure 41: Supplies



Figure 42: Bent post polishing



Figure 43: Pizza



40 Electee - Only Social

Florida Alpha

1. Project Information

i. Date(s): 04/12/24

ii. New/Recurring Project: New

iii. Project Areas:

- Custom
- Community/Liberal Culture
- University/College
- Profession/Engineering
- Chapter/Social
- Education/Professional Development
- K-12 STEM

iv. Number of persons who participated:

Category	Count
Members	2
Electees	11

v. Average number of hours per person spent:

Participating	Organizing
2.0	2.0

2. Project Evaluation

i. General Description

At this chapter of Tau Beta Pi, we hold a social specifically for the electees to get to know each other and a few of our officers before they are initiated into the chapter. At this event, we walked through the Florida Museum of Natural History, using its backdrop of knowledge to inspire conversation amongst the electees at the event. After walking through the museum for an hour, we played a few games for small prizes. The first one was to see how many names of their fellow electees each person could remember. For the second game, the electees were split into two groups and told to think about what they found most valuable in the museum. After a few minutes, they chose a representative to debate the other group. The group that argued their side the best won the prize.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

This event provided the new members a lot of time to interact with each other socially, which they had not really been able to do all as a group before. Before the event, a few of them knew each other, but it was clear that they had never really interacted all as a group before. By hosting this event, these new members were able to establish connections that they would not have been able to form otherwise.

iii. **Organization and Administration**

The two VPs of electees worked together to organize the event. Using the same model outlined by the electee only social last semester, they decided to go to the museum and play games after. One VP was responsible for deciding exactly what games would be played, and the other provided snacks to be enjoyed while playing. Both VPs worked together to decide on the specific date and time for the event.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

Attendance at the museum was free, and snacks came from what we already had on hand.

vi. **Special Problems Encountered**

No special problems were encountered during the planning or execution of this project.

vii. **Overall Evaluation**

The project went off very successfully! The electees got to know each other much more than they did before, especially learning each other's names and majors, as well as future career plans. If this were to be repeated, it works best with the small group size. There were only 11 electees in attendance, so it was easy to go around the museum as a group and play games without anyone being left out. If there was a larger group in attendance, more officers would likely be needed to oversee them, especially during the game section of the event. The one thing that could be changed is the second game about debating what is most valuable in the museum. One of the two groups said that all of the knowledge in the museum is the most valuable thing, which is technically true, but against the spirit of the discussion. In the future, a stipulation that a group cannot say that all of the knowledge in the museum is the most valuable thing. They need to be more specific.

41 Street Clean-Up #3

Florida Alpha

1. Project Information

- i. Date(s): 04/14/24
- ii. New/Recurring Project: Recurring
- iii. Project Areas:
 - Custom
 - Community/Liberal Culture
 - University/College
 - Profession/Engineering
 - Chapter/Social
 - Education/Professional Development
 - K-12 STEM
- iv. Number of persons who participated:

Category	Count
Members	7
Electees	0

- v. Average number of hours per person spent:

Participating	Organizing
0.5	3.0

2. Project Evaluation

i. General Description

Our chapter has adopted a street and is committed to its cleaning maintenance at least six times throughout the year. Adopting a street is a great way to help beautify our community and show our civic pride. Also, seeing volunteers at work is a visible reminder to others that littering is not okay. Participants meet at our two-mile section of road and collect litter for three hours or until the road is completely clean.

ii. Purpose and Relationship to Objectives of Tau Beta Pi

As engineers, we strive to make the world a better place through skills and also through service. Through service projects, like the street clean-up, our members have the opportunity to give back to and get involved with the Gainesville community outside of the University of Florida.

iii. Organization and Administration

This project was led by our chapter's service coordinators through the Gainesville Adopt-A-Street program. Coordinators were responsible for maintaining contact with the Gainesville Adopt-A-Street chair, picking up the clean-up kit the week previous to the event, coordinating the transport of participating members, leading the clean-up, and returning the clean-up kit after the event.

iv. **Total Cost**

\$0.0

v. **Cost Breakdown**

No funds required for this event. The minimum participant requirement of four people was met.

vi. **Special Problems Encountered**

N/A

vii. **Overall Evaluation**

This was the third street clean-up of the semester, so both members and candidates participated. The turn-out for this event exceeded expectations, many candidates were eager to get involved with the chapter. Overall, it was a very smooth, successful event!

42 Spring 2024 Banquet

Florida Alpha

1. Project Information

i. Date(s): 04/23/24

ii. New/Recurring Project: New

iii. Project Areas:

- Custom
- Community/Liberal Culture
- University/College
- Profession/Engineering
- Chapter/Social
- Education/Professional Development
- K-12 STEM

iv. Number of persons who participated:

Category	Count
Non-Members	1
Members	10
Electees	10

v. Average number of hours per person spent:

Participating	Organizing
5.0	2.0

2. Project Evaluation

i. General Description

This was the Spring 2024 iteration of semesterly banquet the chapter holds immediately after initiation. This event celebrates both the end of the semester, as well as providing a nice time for the newly-inducted initiates to eat and socialize with each other, members, and any guests that wish to attend. As the banquet coordinator, I coordinated with the chapter president and the initiation coordinator to find a suitable location on a suitable day for the bulk of the initiates. General planning involved contacting various locations, from restaurants to venue spaces, weighing the amenities of each and the costs with respect to our budget. Eventually, I settled on a local restaurant with a private space, and reserved the space, keeping in contact with the restaurant to select the available food for the participants, getting a head count of those who were planning to attend, and making sure all dietary restrictions were accounted for. As the banquet approached, I secured the award certificates (the chapter awards are announced and awarded at this event), a dessert, and any other things that are required. The banquet itself doesn't require too much of those organizing; guest speakers are invited, if available, and a nice dinner was eaten.

ii. **Purpose and Relationship to Objectives of Tau Beta Pi**

The event seeks to build comradery between members of the chapter, seeks to celebrate the newly-elected members, and can connect the members with alumni and senior members. For example, as with this banquet, it is not uncommon to have a guest speaker, who may share anecdotes about their time in Tau Beta Pi, as well as the skills and lessons they may have gathered from participating in the organization. The banquet strengthens the community of the Tau Beta Pi chapter. Additionally, the chapter awards given at the banquet act as an incentive for additional works by officers, members, and electees alike, and give an opportunity for the members to show their appreciate.

iii. **Organization and Administration**

The banquet is managed almost exclusively by the banquet coordinator, an officer position of our chapter. They select the menu, the venue, the seating for all involved. Depending on the location, they may opt to order certain catering. It is their job to make the banquet run as smoothly as possible, and this year, that involved organizing with the venue, organizing the dessert and awards to be served at the venue, and communicating with any guest speakers that may be interesting in said event. In this instance, since a restaurant was selected, the banquet coordinator did not have to worry about the food. Said coordinator is often in communication with the president and initiation coordinator when it comes to selecting the time and day, but most of the actual planning is done by the banquet coordinator. Fortunately, this semester, the banquet went exactly as planned; the food at the venue was what had been discussed with the restaurant, the space was accommodating for all involved, and a wonderful time was had by all.

iv. **In Conjunction With**

Two initiates from FL Eta chapter attended

v. **Total Cost**

\$1214.0

vi. **Cost Breakdown**

The bulk of the funding went towards the venue and the dinner itself, as this was the priciest part of the exercise. While booking a restaurant theoretically limits the number of people that can go, this was not a problem this semester due to the smaller initiated class. The rest of the funds went towards ordering the award certificates, and the dessert to be eaten at the venue (as bringing a dessert was cheaper than having it served there).

vii. **Special Problems Encountered**

Fortunately, no major problems occurred during the planning of the event and the event itself. The event date was changed with relatively late notice to accommodate as many initiates as possible, but this change was feasible.

viii. **Overall Evaluation**

Overall, the banquet was a massive success. The dinner and awards distribution went as planned, and feedback was positive regarding the enjoyment of those involved. Comradery was increased between those who attended, and current members got me meet and talk with alumni. As this type of event is done every semester, this is not the first nor the last of the banquets; it's expected that next semester will have significantly more initiates, and will therefore require a different venue than that used this semester. With any luck, the success of this event can be recreated next year.

3. **Additional Attachments**

Figure 44: Dr. Griffis gives a speech to some of those in attendance at the banquet

