# THE HONORS COLLEGE NEWSLETTER



# Let's Talk Too!

By Olivia Baldino

On September 10, 2020, I attended an event entitled "Let's Talk Too!" hosted by Student Life. With a theme of diversity and inclusion, this event was fitting in our current political and social climate. Talking about the important issues in our country is essential to keeping the minds of the upcoming generations enlightened and aware so that they are better equipped to serve as productive members of society. Not only that, but tolerance and accountability are necessary for conversations on difficult topics to be had in a respectful manner. I went into this event with high hopes of achieving that shared common goal. And I must say, I was not let down.

The evening started with Furaha Merritt, the president of Black Student Union, presenting a short video that portrayed common stereotypes and misguided actions that can unknowingly insult others. This was a great way to start off by getting everyone's minds focused on the topic at hand. It was followed by a game of Kahoot surrounding the different contributions that the black community has made to society. This was a fun way to inform while also keeping that element of lightheartedness before getting into the serious stuff. Jordin Chandler, a Florida Tech alumnus,relaxed the excitement from the game a bit by beginning the discussion on race. He highlighted the importance of our voice and the power it holds in the world, specifically at Florida Tech. It was a call to action for the audience, as students and faculty at Florida Tech, to share our thoughts and suggestions because, after all, this is our school. We should make sure it accommodates all people attending regardless of race, gender, ethnicity, etc.

Kendall Moore, a local attorney and community leader that has helped with campus events like the Julius Montgomery Pioneer Award and the Martin Luther King Day celebration, continued this when he opened the floor for group discussion. He started off by saying, "There are a number of new buzz words that have come about now that these racial discussions are happening. I'd like to

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# Let's Talk Too!

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throw some out there and open the floor to any comments that people have." Some of the phrases included "Black Lives Matter" and "Karen." This sparked up some really productive and insightful conversations about how much social media has transformed the way we interact and share. Almost everything is recorded these days, which can be good and bad. The evidence is much more concrete and indisputable, but when does it get taken too far? With everything being shared, information that could save lives is more accessible, but can also be damaging to those who view it. The technology we have at our fingertips doesn't come with a filter or a way to keep valuable information out of the wrong hands. The result is even more injustice and intolerance. However, we were encouraged, as members of the Florida Tech community, to use our platform and devices to fight for justice and to be the change we want to see.

All three speakers were persistent in pushing each and every person listening to speak up for what they believe in. Our culture today is filled with people who have strong opinions and who are unlikely to be open to a conversation about the other point of view. That is not what using your voice means. Using your voice is fighting injustice with reason, knowledge, understanding, and peace. For any sort of change to happen, we have to be people who value and respect the opinions of others. It was clear from the event that Florida Tech is open to new suggestions on how it can make a more accepting atmosphere for all students. It is our job as upstanding members of the Florida Tech community to speak out about injustice while gaining the respect and even admiration of our peers.

# **Call for Writers**

#### By Thomas Mathey

The Honors Newsletter is written and edited by Honors students with a passion for writing and is always looking for new writers. If you want to write informative and engaging stories, learn ways to improve your writing style, or put your voice out into the world, then the Honors Newsletter team is a great place to start! Our goal is to bring the Honors student body a newsletter that caters to everyone's interests and highlights research programs, available Honors classes, and other academic opportunities. If you're interested in joining or have any questions, contact Thomas Mathey at tmathev2018@mv.fit.edu.

# Honors College Faculty and Staff, Fall 2020

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# **The Honors College Newsletter**

# is a publication of Florida Tech's Honors College.

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Thank You

Special thanks to those who contributed to this issue of the Honors College Newsletter: Olivia Baldino, Laura Guidugli, Jennifer Tolliver, Trinity DiNunzio, Ruth Nichols, Thomas Mathey

Connect With Us





# Student Achievement: Published Author

### By Ruth Nichols

Ruth Nichols, founder of a small organization called SciWare Books, recently published a graphic novel called We Remember: The Survivors of WWII. The book includes a narrative following three kids each from different parts of the world-Aldrich, a Jewish boy from Nazi Germany; Mei, a girl from China; and Isaiah, an African-American boy from the US-that illustrates the prejudices that they must face. In addition, the book includes exclusive interviews with various Holocaust survivors and additional learning resources and background information. A copy of the e-book or paperback is available on Amazon. SciWare Books is an educational organization that teaches subjects through alternative methods such as comics, videos, and educational events with the goal of making science and education more accessible, comprehensible, enjoyable, and inclusive; learn more at

<u>sciwarebooks.blogspot.com</u> or <u>https://www.facebook.com/sciwarebooks.</u>

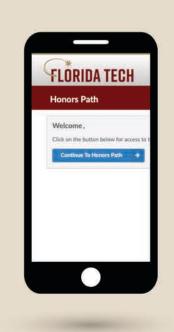
# **Honors Reading Group**

By Jennifer Tolliver

The Honors Reading Group is a great way to unwind, stretch your mind, and express yourself. Personal experiences, opinions, and contemporary issues are all fair game as we explore each novel. The conversation can take unexpected turns as we bring a little of ourselves (and our majors) into the mix. Members broaden their perspectives, and the community grows closer with each interaction.

The reading group fosters inclusivity and acceptance among its members. Dr. Perdigao currently leads the book club, and under her guidance, the group is led to exciting discoveries that capture the imagination in a safe environment that promotes personal growth. The discussion about the previous book *Beloved* by Toni Morrison facilitated reflection on the generational effects of slavery and its lasting influence. For our second book, we explored the parallels between periods in the time-traveling novel *Kindred* by Octavia Butler. Connecting with others is a great way to shake off the shut-in blues and break up the monotony of studying.

There are Honors College benefits too! Honors students can earn one activity point per meeting attendance and up to three for a short reflective piece. Participation is flexible; a student can select which meetings to attend, complete a written submission, or both. The book that is up for discussion is typically divided into three easily digestible chunks for live participants, and the Honors Reading Group meets once a week. If you're interested in developing friendships, sharing your thoughts, and reading, then this is the club to join!



# **Honors Path**

Honors Path, a proprietary software program, enhances honors students' education at Florida Tech so that high-achieving students can make the most of their potential. The software portal encourages honors students to plan ahead so they graduate from Florida Tech with a career profile that goes beyond a degree and a great GPA. Below is a tutorial on how to submit your activity hours into the portal.

### Step 1:

Access the website: apps.fit.edu/honorspath

#### Step 2:

Log in to the Honors Path Portal using your Florida Tech email and password.

### Step 3:

Click on "Continue to Honors Path" on the confirmation page.

#### Step 4:

Click on "Activities" on the home page.

### Step 5:

Fill in the basic information about the event.

### Step 6:

Use the scroll down menu to select the Activity Hours Type.

### Step 7:

Answer each of the following questions in the "Reflection" section:

- Describe the activity and your level of participation.
- What did you learn from your experience? Reflect on how the activity increased your knowledge or appreciation of the topic.

### Step 8:

Click on "Submit New Activity Hours," and wait for an honors faculty member to approve.



Photo courtesy of Grace Harrington

# Service Opportunities & Community Involvement on Campus

By Trinity DiNunzio

Getting involved in the Florida Tech community is a great way for Honors students to learn about and make an impact on the world we live in. There are an array of ways to help in a form that best suits each individual's interests.

From new ways to expand our recycling program to our now fully electric golf cart fleet. The Student Organization for Sustainable Actions (SOSA) is a great way for our Honors students to have the opportunity to make an observable difference in our local community. SOSA, informally known as the Sustainability Club, is a great opportunity to make your mark on our university. They organize events monthly, from clean-up events to improvements to Florida Tech's systems. SOSA has a very flexible schedule with bi-weekly meetings on Thursday nights or Monday nights, where you can pick between the two identical meetings based on your own schedule.

Another way to get involved in a more informal way is to attend the service events on campus like the recent Fall Earth Day Campus Clean-Up. A huge success, clubs, organizations, and individual students came together on Saturday, October 24, to thoroughly clean the entire Florida Tech campus over the course of two hours.

SOSA continues to have smaller, similar events, often even partnered with other clubs, such as beach cleanups where you can socialize and even learn to surf with the Surf Club afterwards. Some projects in the works include promoting reusable water containers on campus and making sustainable face masks. Honors students interested in climate change, environmental science, or sustainability will have the opportunity to discuss and address these issues with their peers.

# **Online Learning**

### By Laura Guidugli

The coronavirus outbreak has become a major disruption to colleges and universities across the world, with most institutions canceling in-person classes and moving to online and hybrid instructions. The pandemic also became a significant threat to nearly every college life aspect, from admissions and enrollment to collegiate athletics. As a way to calm students, faculty, and parents, Florida Tech created a Pandemic Response Committee and developed several "Return to Learn" recommendations to facilitate the university's safe and efficient return to campus living and learning during the fall semester. In addition to the campus-wide implementation of physical distancing measures and the use of personal protective equipment, the university altered several policies regarding academics, housing/dining, and campus life. Among some of the most significant changes made were:

- The cancelation of fall break and the option to go fully remote after the Thanksgiving holiday (in fact, the university is encouraging the students who are planning to leave campus for the holidays to complete their semester online)
- The mandatory use of face coverings for students and faculty during all class periods
- The creation of additional class sections to accommodate all students in a safe distance
- The suspension of dining service to the public
- The implementation of virtual engagement opportunities and resources through Student Life programs
- The restriction of public access to campus



# **Faculty Fun Facts**

The Honors College invited one of our faculty fellows, James Brenner, Ph.D., to answer a couple of questions for this issue's Faculty Fun Facts.

# Why did you go into this career?

"When I was four, I took a drug named tetracycline that stained my teeth yellow. I went into chemical engineering, nanotechnology, and materials science and engineering when I watched my dentist mix together a polymethyl methacrylate nanocomposite for my teeth at age 5."

# What career accomplishment are you most proud of?

"The career accomplishment I am the most proud of is the founding of Florida Tech's Nanotechnology Minor Program. I originally wanted it to be the centerpiece around which we would center our Honors Program, long before anyone else envisioned an honors program here way back in 2010."

# Who are your role models?

"My father, Mobil's first environmental engineer, told me that you go to college to learn how to think.

Levi Thompson, my dissertation advisor at the University of Michigan, told me

that I would need to re-do six months of experiments if I didn't fix the leaky relief valve on a defective liquid nitrogen cylinder I had received. I fixed it, almost getting frostbite in the process, and from that I learned that you have backup plans for your backup plans. He also taught me the importance of knowing the literature, which is one of the hallmarks of the spring 2021 Nanotechnology lecture course.

Chris Marshall, my boss at Argonne National Laboratory, taught me the importance of checking your ego and gave me experience with being the go-fer for a 1000-person catalysis conference. I have other role models as well, but these are some of the most critical lessons I learned."

# What is your favorite activity to do in your free time?

"I used to play golf in my spare time. Now that I am co-founder of a UV LED disinfection company, I have no free time."



# Why did you offer to teach a class for Honors College students?

I planned on making the Nanotechnology Minor Program the centerpiece of an honors program long before Florida Tech's Honors Program existed. The program encourages people to use their curiosity in nanotechnology to make intellectual connections that create value for their customers and job versatility for themselves.

# **Research Opportunities for Honors Students**

### By Olivia Baldino

To earn Honors credit hours, you can enroll in Honors Research Experience and Undergraduate Research Experience courses as an Honors student. These are one to three credit courses that count towards the Honors credit hour requirement. You can also participate in Honors Symposium presentations, conference presentations, and paper publications that can count toward either Honors credit hours or Honors activity hours. Here are some simple ways to get started:

 Contact a faculty member about their research projects including undergraduate students  Get involved in panel discussions with and presentations by those faculty members

These are great ways to become known to faculty members and get involved in Honors research. Keep in mind that the research path you choose doesn't have to be within your major. It is encouraged that you ask around and see how you can find research that complements your major or expands to different areas.

Looking into the future, it is a great idea to jump on these opportunities as soon as possible because the Honors College plans to launch the Honors undergraduate research journal next year. This will include publications and presentations from Honors students in their research. The more equipped you become in this next semester by attending workshops, training on abstracts, and presenting research papers and posters, the more experience you will have to apply to the Honors undergraduate research journal.

# **Student Highlight**

The Honors College Newsletter invited Honors College student Pragya Jha to answer some questions about their life and aspirations.

# Why did you choose your degree program?

"Applied Mathematics takes my love for math and turns it into a practical field that extends to all STEM fields where I can take math and explain the mysteries of the universe. I also chose Astrobiology as a major, but that decision was such a surprise to me: I never have been a biology person and have always been more oriented towards chemistry and physics. But when I discovered the scope of Astrobiology, I couldn't resist being attracted to a field that not only studies astrophysics, but also the biology of what is life."

# What is your biggest aspiration?

"I have wanted to become an astronaut since I was 3 years old. At the time, I did not know the word 'astronaut' but little me knew that I wanted to go to space. My family moved from India to the USA to bring me closer to my dreams and to NASA. When I applied to FIT, I had no idea that this school had graduated so many astronauts and that many current students are also aspiring astronauts. I find this atmosphere so exciting and engaging in the Space Age since all of us can work together in interdisciplinary research to take mankind into the vastness of space."

# What quality do you think all Honors students have in common?

"A quality I have observed in myself and many Honors students is the hunger for knowledge. We are active learners and aspire to be students for life. We do not settle on one subject and stay constant – we keep on learning new things to keep our selves engaged. You will always find me and others learning; after I finish reading or learning a new topic, I ask myself - what next? How can I use this knowledge and apply it to solving a problem? What can I learn next?"

# How do you balance your schoolwork and social life?

"As a student, of course I spend most of my time attending class, re-watching lectures, doing homework, and studying – but, sometimes I forget that I can take a break and relax. I balance my mind between schoolwork and social life by taking time to do physical exercise everyday: running, going on a walk, cycling, or playing tennis. I also love meeting with friends for study groups or nowadays 'study zooms.' I have learned that the key is to exercise self-discipline: holding myself accountable for when my school life holds more weight vs. when I can take a small break away from it."

# Who would you say is your role model?

"I look up to many people for inspiration and their work ethic: my teachers and professors, scientists and engineers, but I find that having one role model distracts me from understanding that my path is different from all others. I take lessons from many people and use that to build myself up so that I can move at a good pace on my path. And I take my parents as my role models because they have always supported me in my literally out-of-the-world dream. And time to time I also consider myself a good model because I know I have given my 100% in a work and to also encourage self-improvement."

# What do you enjoy doing in your spare time?

"I absolutely love nature and the outdoors: for me nature has served as an exciting and mysterious place that ties to science while also being a peaceful space of mind. I love going on scenic long drives, exploring new places, playing tennis and badminton, listening to new music, and learning new languages! In free time on weekends, you will find me painting, on a run, or spending family time with my little brother."

# **Honors Hour**

### By Thomas Mathey

The Honors Hour is an event hosted by the Honors Council that occurs on Fridays. From game nights to informative lectures, the Honors Hour provides students with an opportunity to meet fellow Honors students who share similar interests all while earning activity hours. Honors Council members rotate on hosting the event, providing students with a way outside of announcements to get to know the people who are dedicated to making the Honors experience better with each passing year. The topics of each Honors Hour are emailed to every Honors student, so keep an eye out for an event that interests you!

# Spring 2021 Honors Courses List

#### HON 2000: Honors Seminar (CRN: 26608) (3 credits)

Highlights the relationship between the humanities, social sciences and STEM fields. Includes guest lectures from various disciplines. Emphasizes analysis and synthesis of sources. Topics include "Engineering the Body," "A.I.," "Race to the Moon" and "War and Technology." May be repeated for a maximum of six credits, provided topics change. (HU)

#### BIO 1020: Biological Discovery 2 (CRN: 26118) (3 credits)

Introduces the fundamental principles of evolution, biodiversity, physiology and ecology. Provides an integrated approach to the study of the hierarchal structure and function of living organisms and communities. High school biology and chemistry recommended.

## COM 2223: Science/Technology Communication

(CRN: 17643) (3 credits)

Practice in the technical and scientific writing style and format, including gathering and using data to prepare reports. Includes abstracts, reports, letters, technical descriptions, proposals and at least two oral presentations. (COM) (LA) (Hon) (Prerequisite: COM 1102)

### HUM 2552: Modern/Contemporary Philosophy

(CRN: 26630) (3 credits)

Surveys key philosophical problems that occupied philosophers in the modern period and today. Emphasizes the analysis of theories by modern and contemporary philosophers on issues such as the nature of knowledge, facts versus values, personal identity, and consciousness in their historical context. (Prerequisites: COM 1102)

### MTH 1020: Honors Calculus 2 (CRN: 25403) (4 credits)

Provides a rigorous treatment of integral calculus. Emphasizes proofs. Includes integration and applications of integration, further techniques of integration, improper integrals, integrals depending on a parameter, sequences and series, uniform convergence of series and improper integrals. (Prerequisites: MTH 1001, MTH 1010)

### MTH 3200: Honors Differential EQ (CRN: 26173) (4 credits)

Provides analysis of differential equations. Emphasizes proofs. Includes existence and uniqueness theorems, Lyapunov stability theory, differential and integral inequalities, Gronwall-Bellman lemma, matrix exponential, differential equations depending on a parameter, continuity, and differentiability or a solution with respect to a parameter. (Prerequisites: MTH 1002, MTH 1020, MTH 3102)

### PHY 1001: Physics 1 (CRN: 25207) (4 credits)

Includes vectors; mechanics of particles; Newton's laws of motion; work, energy and power; impulse and momentum; conservation laws; mechanics of rigid bodies, rotation, equilibrium; fluids, heat and thermodynamics; and periodic motion. (Prerequisites: MTH 1001, MTH 1010, MTH 1002, MTH 1003, MTH 1020, MTH 1002, MTH 1003, MTH 1020)

### PSY 4590: Honors Psychology (CRN: 18851) (1 credit)

Discusses theoretical and empirical research in psychology and related fields in a seminar format. May be repeated for a total of four credits. (Requirement: Acceptance to psychology honors program and department approval.) (LA)