



# AMY ZEH HIGH-IMPACT PRACTICES COURSE DESIGNATION STUDENT SHOWCASE

**Celebrating Academic Excellence in  
High-Impact Practices Designated Courses**

**Nov. 20 | 10 a.m.-Noon | Key West Ballroom, UCF Student Union**



# Welcome to the **AMY ZEH HIGH-IMPACT PRACTICES COURSE DESIGNATION STUDENT SHOWCASE**

The UCF Amy Zeh High-Impact Practices Course Designation Student Showcase honors the memory and dedication of Amy Zeh, who served as the Assistant Director of Service-Learning from 2006 to 2019. She championed student success and believed High-Impact Practices (HIPs) were essential to the undergraduate experience.

The HIP Course Designation Student Showcase is held during the fall and spring semesters. It is an opportunity for students to share individual or team HIP-designated course projects with the UCF community. Students can participate virtually, in person or in both formats.



## High-Impact Practices Course Designations

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HIP-designated courses give students the opportunity to apply what they learn in the classroom to real-world contexts that strengthen academic, professional, and personal growth. These experiences promote deeper learning, meaningful engagement, and connections between students, faculty, and the broader community. UCF offers four undergraduate HIP designations—Global Learning, Integrative-Learning Experience, Research Intensive, and Service-Learning,—each designed to enhance student success through hands-on, reflective, and integrative learning.



## Global Learning

Global Learning (GL) helps students develop intercultural competencies and a deeper understanding of international systems and their effects on humanity. GL-designated courses engage students in analyzing global relationships and perspectives, including those of target cultures and marginalized communities. Each course culminates in a student presentation that demonstrates how the experience has enhanced their ability to consider global issues from multiple viewpoints.

## Integrative-Learning Experience (IE)

The Integrative-Learning Experience (IE) helps students connect classroom learning with real-world applications. IE-designated courses guide students in linking the core knowledge and skills of their major to professional, civic, and personal contexts. Each course includes three essential components—intentional learning, participation in high-impact practices, and metacognitive reflection—to help students make meaningful connections between their academic experiences and future goals.





## Research Intensive (RI)

Research-Intensive (RI) courses engage students in the process of discovery through guided research and academic scholarship. Under the mentorship of a faculty member, students actively participate in a structured line of inquiry that deepens their understanding of research methods and disciplinary practices. Each RI-designated course includes a research deliverable that demonstrates the student's ability to apply scholarly inquiry to real-world or academic questions. Only undergraduate courses are eligible for the RI designation.

## Service-Learning (SL)

Service-Learning (SL) connects academic learning with community engagement. Through SL-designated courses, students collaborate with nonprofit organizations, public schools, and government agencies on projects that address real community needs. Each course integrates academic content with meaningful service and requires students to complete a reflection activity that deepens their understanding of course concepts, civic responsibility, and personal growth.



# PROJECTS

## GLOBAL LEARNING

- 70 **Value Based Reimbursement in the United States and Sweden**  
Madysn Roth

## INTEGRATIVE-LEARNING EXPERIENCE

- 5 **Intensity-Modulated Pelvic Radiation Therapy in Treating Patients in Endometrial Cancer**  
Sualba Alejandro, Victoria Drovilus, Valerie Block, Angelina Salort-Carrero, Dylan Fox
- 7 **Analysis of Cardiometabolic Health Disparities of Sex and Gender Minorities in NIH All of U.S. Database**  
Vardhan Avaradi
- 15 **Ibuprofen/ Caffeine Lower Back or Neck Pain Study**  
Annamae Buckley, Yennifer Perez

- 16 **The Art of the Roast**  
Alexander Bustillo
- 19 **Professionalism in Practice: The Power of the Questions You Ask**  
Kelsey Chico
- 21 **Trade-off Between Surface Area and Aerodynamic Drag in Solar Electric Vehicle Design**  
Wade Cornell, Hudson Deppen
- 24 **Effects of Application Injectable Platelet-Rich Fibrin as Adjunct Therapy in the Initial Treatment**  
Stephanie Da Silva
- 25 **Paths to Prevention**  
Christine De Castro
- 53 **From Barista to Bartender: How ADAM Showcases AI's Role in Hospitality**  
Mary Mann Cortes

- 57 **Machine Learning for Decision-Based Game Programming**  
Jessica Morris
- 60 **What is the Effect of Physical Activity on Women with Polycystic Ovary Syndrome?**  
Sidratul Noor, Angela Avdella, Sahti Artilles, Ritchy Augustin, Eryka Salta
- 65 **Hexvix Blue Light Cystoscopy vs. White Light Cystoscopy in the Detection of Bladder Cancer**  
Michelle Poquette, Andrea Rodriguez, Mehdi Ezzair, Thalia Vega, Natalia Mateo
- 79 **Ketamine for Rapid Reduction of Suicidal Ideation: A Randomized Controlled Trial**  
Samantha Siraj, Rachel Chillari, Thomas Gregorio, Jerrel Joseph, Shinhei Yau

- 81 **Escitalopram in the Treatment of Children and Adolescents with Generalized Anxiety Disorders**

Kathleen Soares

- 84 **The Price of Perfection**

Carolyn Tilman, Alysia Furbish, Samuel Whitehead, Yasmin Osorio

- 92 **Beyond the Degree: How Psychology Majors Lead with Empathy**

Nicole Vila

## RESEARCH INTENSIVE

- 1 **Cloning and Preparation of CTL0223 for Future Study in Chlamydia trachomatis Pathogenesis**

Mariam Abdelaal, Sara Ejaz

- 2 **Rhythmicity and Sleep Quality through Exercise Interventions in Alzheimer's Disease**

Alexander Acevedo

- 10 **The Strength of Association between Binge Drinking and Hospitalizations from Strokes in Adults**

Samantha Billones

- 11 **Russian Journalism After the Collapse of the Soviet Union**

Felipe Blaya

- 13 **Rural Queerness - An Exploratory Documentary**

Brooklyn Bolkosky

- 14 **Association Between Obesity and Cardiovascular Disease Hospitalizations in Florida, 2019**

Alexander Boulos

- 28 **The Strength and Association Between Yearly Mammograms and Breast Cancer in Women**

Colette Donohue

- 30 **Association Between Depression and Alzheimer's Disease Mortality Among Florida Adults**

Addison Engelman

- 33 **Toxicity of E-cigarette Flavoring Chemicals on In-Vitro Bronchial Epithelial Cells (BEAS-2B)**

Caroline Ferrarin

- 36 **Panpsychism: The Mental Properties of the Universe Around Us**

Sebastian Gonzalez

- 39 **The Use of Retinoid in the Treatment of Chronic Hand Eczema**

Kaynat Hasnain

- 40 **Using Immunofluorescence to Study MDA-MB-231 and NK-92's Interactions Through BSB Bridging**

Allison Hatteroth

- 41 **Engineering viable Chlamydia trachomatis Effector Genes for Future Transgenic Analysis**

Chloe Henry, Jasmine Andrews

- 42 **Rediscovering Tradition: Russian Cuisine after the Soviet Collapse (1990s)**  
Matthew Horelick
- 43 **The Difference Between How Russians and Americans View Freedom**  
Tyler Hunley
- 45 **From Collapse to Capital: Russian Youth Attitudes Toward Wealth Before and After Soviet Collapse**  
Aleksandra Jegede
- 46 **The Strength of Association between Physical Activity and Deaths from Alzheimer's among Adults**  
Jasmine Kaur
- 62 **The Strength of Association Between Tobacco Use and Mortality from Coronary Heart Disease in Adults**  
Mariana Oza
- 67 **Nutritional Intervention in Ulcerative Colitis: Improving Outcomes Through Diet**  
Arianna Rivera
- 68 **Cloning of the Chlamydia trachomatis Effector Gene CTL0338 for Future Analysis**  
Santiago Romero, Denniel Mojica Rosa
- 69 **Purification and Analysis of Fungal Hemolytic Factors**  
Avri Rose
- 73 **Molecular Cloning and Vector Assembly of the Ct Effector Gene for Transgenic Drosophila melanogaster**  
Alizah Shah, Sierra Smith
- 74 **Examine the Strength of the Association Between Physical Activity and Mortality from Diabetes**  
Dua Shaikh
- 77 **Preparing Chlamydia trachomatis Effector Cell Gene CTL0886 for Future Evaluation in Drosophila Flies**  
Samantha Shortley, Mytu Nguyen
- 83 **East of Anacostia: A Tale of Systemic Inequities and Health Disparities in Washington D.C.**  
Ann Mary Thomas
- 86 **Strength of Association between Physical Activity and Mortality from Alzheimer's Disease in Adults**  
Katrian Tiqui
- 87 **Motivation Factors and the Frequency of Exercise Activity Among College Students**  
Gabrielle Tonkin, Dana Farmer, Bianca Turcios, Kayla Pangilinan, Paulo Dias-Da Silva
- 88 **Investigating the Therapeutic Potential of APR-24 on p53 and Apoptosis Reactivation in Oral Cancer**  
Carolina Turcios, Salma Chouait

- 89 **The Strength of Association Between Tanning Facilities and Melanoma Incidence in Adults**  
Emily Urena
- 91 **The Strength of Association between Tobacco Use and Incidents of Esophageal Cancer**  
Paulina Vezikov
- 93 **The Effect of Text Format on Short-Term Memory**  
Emma Weissman, Kristen Hamann, Gabriela Jimenez, Daniela Martinez
- 96 **The Strength of Association between Elevated Levels of Cholesterol and Mortality of Coronary Heart Disease**  
Artemis Zi

## SERVICE-LEARNING

- 3 **Environmental Conservation with the UCF Arboretum**  
William Adams, Tyler Ruiz

- 4 **Hearts 2 LEAD**  
Ananya Agarwal, Bel Lopez
- 6 **Reimagining Success for the Children of Immigrants in Creative Industries**  
Beatriz Alerte
- 8 **Preserving the Rights and Quality of National Parks Against the Commercialization of Natural Areas**  
Ryan Baxter, Samantha Maiorino, Leah Lascano
- 9 **Luminous Lava**  
Brinlie Bergman, Kylie Daum, Linsey Vo, Akshay Ramjisingh, Shayan Noor
- 12 **Lake Restorations Throughout Seminole County**  
Jillian Blowers
- 17 **Volunteering at the American Muslim Community Clinic**  
Yazan Chakfe

- 18 **Little Learners, Big Impact: Inspiring Ocean Awareness in Young Minds**  
Carly Chard, Kate Frawley, Eduardo Sanchez
- 20 **The Power of Listening**  
Mckenna Clark, Arya Raheja, Ashley La Rosa, Eitan Tangir, Jayden Daniels
- 22 **OWC Social Media Refresh**  
Kendall Crawford, Georgina Waterhouse, Holly Wilmes
- 26 **Shepherd's Hope**  
Madisyn DeMar, Sarah Levin, Peri-Marina Schreck
- 27 **Breaking the Bullying Barrier**  
Carrie Depner
- 29 **Peer Mentoring and Its Importance on Incoming Freshman**  
Jayda Egan, Matthew Jebb

- 31 **Paws on Board:  
Transporting Dogs from  
Shelters to New Homes**  
Angelina Fasolo, Mitchel  
Woodrow, Sarah Burbank,  
Thalia Dittman, Michael  
McKnight, Kayla Buchholz
- 32 **The World is My Oyster:  
Restoring Nature, Inspiring  
Minds**  
Antonia Ferguson
- 34 **Change Through Social  
Media: Sparking Wildlife  
Conservation with One  
Click**  
Lauren Fitzsimmons, Anne  
Reichle, Noshi Kapoor, Sara  
Wise, Robin O'Meallie, Greg  
Zboch, Bryce Fable
- 35 **Emergency  
Communications & Public  
Affairs through the  
American Red Cross**  
Bryan Gonzalez
- 37 **Exploring Stingrays with  
Young Learners**  
Nicholas Groves, Danielle  
Cora
- 38 **From Classroom to Career:  
Fostering Student Success  
Through Service**  
Brianna Guinigundo
- 44 **The Impact of Guided  
Inquiry in Chemistry  
Fundamentals Laboratory**  
Quinn Jeffery
- 47 **LEADing with Cup-passion**  
Mackenzie Kelly, Alexa  
Frances, Ayla Friedman,  
Victoria Gamponia, Isabela  
Negley
- 49 **Peer Mentoring: A Growth  
and Self-Discovering  
Experience**  
Ana Esther Laranjeira,  
William Graham, Ashleigh  
Miller
- 50 **Service Learning Through  
Seven Cups of Tea**  
Madison Lee
- 51 **Diving Deep: Inspiring  
Young Scientists Through  
Ocean Exploration**  
Chloe Lowman, Mia Sims
- 52 **Sustainability Through  
Social Service**  
Phillip MacGregor
- 54 **Complete Picture: Bird  
Behavior on Fragmented  
vs. Intact Oyster Reefs**  
Sophi McGarrity, Natalia  
Knapp-Seale, Laura  
Ramsey, Enno Turner,  
Gwyneth Kirby
- 55 **The Fizzicians: An  
Explosive Exploration of  
the Scientific Method!**  
Aubrey Mckeeon, Emileka  
Stephan, Jack Svajko, Ryan  
Sumiantor, Onella Moitra
- 56 **Lagoon Lessons: Where  
Science Meets Service-  
Learning**  
Cori McWilliams,  
Christopher Poullos
- 59 **Legacy Leaders**  
Joseph Neddo, Samantha  
Renda, Eli Richard, Connor  
Buttitta, Athan Huskey,  
Adam Lease

- 63 **The Great Walk: Is it a Walk in the Park?**  
Keri Pollock, Gretchen Mahalic
- 64 **S.O.A.R: Stomp-Powered Orbital Air Rockets**  
Valerie Pompee, Thomas Blais, Wendy Davis, Lincoln Lynch
- 66 **Leading Change, Saving Lives: The Leadership Behind the National Marrow Donor Program**  
Madison Rhubart, Isabella Mota
- 71 **In Service of a Great Ape**  
Saidee Rust
- 72 **Healing with Hope: Expanding Access to All**  
Aashna Shah
- 75 **Engaging in Experiential Learning to Support Community Well-Being**  
Shermin Shajan Thomas
- 76 **Poetry in Practice: How Poetry Strengthens Learning and Curiosity**  
Raiya Shaw
- 78 **Experiences in Learning to Teach Organic Chemistry**  
Anton Sia, Malia Jeukeng, Yanni-Edgar Walker, Lida Kutho, Aidan Maciewicz, Gabriel Pedroza, Sobirjon Sharipov
- 80 **Secrets, Symbols, Shifts**  
Jacob Smith, Corban Pendrak, Titus Holmes
- 82 **LEADing with the Heart**  
Bryanna Sparks, Mia Quinones, Rachel Waldman, Uma Sreekumar
- 85 **From Peers to Partners**  
Emily Timotic, Katerina Fernandez, Aleksandra Nikolic
- 90 **Mutual Learning of Instructor, Assistant, and Student in the Undergraduate Learning Assistant Program**  
Samuel Veleke
- 94 **Saving the Arctic: Learning Through Animals and Art**  
Sara Wieschhorster, Andrea Goldfarb
- 95 **Building Connections, Solving Mysteries: Lessons from Forensic Science Outreach**  
Willow Young, Zach Burr, Rita Konathapally

View more projects and presentations in the  
**Amy Zeh High-Impact Practices Course**  
**Designation Virtual Showcase** on [UCF STARS](#).



Scan the QR code to view virtual projects.



# THANK YOU TO THE FACULTY AND STAFF WHO MADE THIS EVENT POSSIBLE

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Dr. Quynh Dang  
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Dr. Natalia Toro

## **Student Success Communications Team**

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To learn more HIP opportunities, visit the [HIP Hub](#) webpage.