AUSTIN HEIL, Ph.D.
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A. Academic History

A.1. Present Rank: Academic Professional Associate, Department: Marine Sciences

A.2. Allocation of Effort (1.0 FTE): on appointment 2023: 20% Instruction, 25% Research, 5% Service, 50% Administration;
2024: 30% Instruction, 15% Research, 5% Service, 50% Administration

A.3. Administrative Title: Director of Marine Sciences Instructional Laboratory

A.4. Graduate Faculty Status: Active, appointed August 2023

A.5. Degrees Earned: Ph.D., Science Education, University of Georgia, 2022
M.S., Biological Oceanography, Florida State University, 2017
B.S., Biology (Minor: Chemistry), Florida State University, 2013

A.6. List of Academic Appointments

Aug 2023–present	University of Georgia Academic Professional Associate, Marine Sciences Director of Marine Sciences Instructional Laboratory Graduate Program Faculty Affiliated Faculty: Office of Sustainability, River Basin Center, Owens Institute for Behavioral Research, Scientists Engaged in Education Research
Sep 2022–Jul 2023	University of Georgia Marine Extension and Georgia Sea Grant Public Service & Outreach Assistant Faculty Marine Educator & Public Programs Coordinator
Jan 2022–Aug 2022	University of Georgia Graduate Research Assistant, Marine Sciences Worked with Dr. Joye to lead Ocean Discovery Summer Camp.
Jun 2021–Jul 2021	Center for Teaching Learning (CTL) Graduate Experiential Professional Development Intern
Jan 2019–May 2021	University of Georgia Graduate Teaching Assistant Franklin College, Department of Marine Sciences and Division of Biological Sciences; Odum School of Ecology
Aug 2014–May 2017	Florida State University Marine & Coastal Laboratory Graduate Research/Teaching Assistant, Biology

A.7 Professional Development

Aug 2020–May 2021	National Ocean & Atmospheric Administration Florida Keys National Marine Sanctuary Mission Iconic Reefs: Graduate Student Intern
May 2017-July 2018	Florida Fish & Wildlife Research Institute Molluscan Biologist, St. Petersburg, Florida

B. Instruction (20%, then 30%)

B.1. Courses Taught

I have taught MARS1020 Biology of the Marine Environment (for students who need to satisfy their life science requirement), supervised undergraduate research (MARS 4960R), and taught two graduate courses focused on college science teaching (MARS 7360 Teaching Internship in Marine Sciences, MARS 7770 University Teaching in Marine Science) (Table 1).

Table 1: Summary of Courses Taught at UGA since Fall 2023 along with enrollment and credit hour (CH) production

Course	% Credit	Title	Term	Student Enroll.	CH	Total CH
MARS1020	100	Intro to Marine Biology	SP24	53	3	159
MARS4960R	100	Faculty-Mentored Undergraduate Research I	SU24	1	3	3
MARS7360	100	Teaching Internship in Marine Sciences	FA24	3	2	6
MARS4960R	100	Faculty-Mentored Undergraduate Research I	FA24	1	1	1
MARS1020	100	Intro to Marine Biology*	SP25	87	3	261
MARS7360	100	Teaching Internship in Marine Sciences	SP25	2	2	4
MARS4960R	100	Faculty-Mentored Undergraduate Research I	SP25	4	1	4
MARS7770	100	University Teaching in Marine Sciences**	FA25	10	2	20
MARS7360	100	Teaching Internship in Marine Sciences	FA25	2	2	4
MARS4960R	100	Faculty-Mentored Undergraduate Research I	FA25	3	1	3
MARS1020	100	Intro to Marine Biology	SP26	41	3	123
MARS1020	100	Intro to Marine Biology*	SP26	37	3	111
MARS7360	100	Teaching Internship in Marine Sciences	SP26	2	2	4
MARS4960R	100	Faculty-Mentored Undergraduate Research I	SP26	4	1	4
			Totals	**250**	**29**	**707**

* approved as an Ecological sphere elective for the Sustainability Certificate and Environmental Education Certificate

** approved as a departmental equivalent for GRSC7770

B.2. Re/development of Undergraduate Courses at UGA

(i) MARS1020: Biology of the Marine Environment

- Complete overhaul of the curriculum to shift the focus from marching through marine phyla to an issues- and competency-focused approach where students apply marine biology concepts to their lives and future careers. Course satisfies three institutional competencies and contributes to the Certificate in Sustainability and the Certificate in Environmental Education. The redesign included moving the course to

a no-cost model and creating space for eight guest lectures from Marine Sciences graduate students to practice their teaching skills.

(ii) MARS1021E: Biology of Marine Environments (online)
- Complete overhaul of existing curriculum to align with redesign of MARS1020. Redeveloped version will be offered for the first time in Summer 2026.

(iii) MARS3050: Careers in Marine Science
- Developed course in 2025 to meet student needs for post-graduation preparation. This course fulfills an elective requirement for Ocean Science B.S. degree. Will be offered for the first time in Fall 2026.

(iv) MARS4960S: Faculty-Mentored Undergraduate Service and Outreach in Marine Science
- Developed course in 2025 to meet student needs for science communication and outreach while fulfilling a research requirement for Ocean Science B.S. degree. Will be offered for the first time in Fall 2026.

B.3. Re/development of Graduate Courses at UGA

(i) MARS7360: Teaching Internship in Marine Sciences
- Redeveloped the course to be relevant to graduate student interest and flexible to meet their individual teaching goals in the classroom and teaching laboratory; students were also provided with opportunities to engage with academic and community events in Athens and within the university. The following students were mentored and advised in those events:
  - Autumn Baker, Hannah Budroe, Ella Bourbonnais, Huck Baggy, McKenzie Powers, Lucia Ramirez Joseph, Moussa Alaqsum, Zac Marinelli

(ii) MARS7770: University Teaching in Marine Science
- Developed in Fall 2024 to satisfy GRSC7770 Graduate Teaching Seminar requirements, for graduate students in Athens and Skidaway. Includes marine science-specific teaching strategies and active learning pedagogy. Offered for the first time in Fall 2025.

B.4. Guest Lectures at the University of Georgia

(i) 2026: ESCI4210: Elementary Education Science Methods (Dr. Julie Kittleson, Science Education Department)
(ii) 2025: BIOL1108: Principles in Biology II (Dr. Carrie Pucko, Division of Biological Sciences)
(iii) 2025: ECOL7770: University Teaching in Ecology (Dr. Brittney Ferrari, Odum School of Ecology)
(iv) 2025: ESCI4210: Elementary Education Science Methods (Dr. Julie Kittleson, Science Education Department)
(v) 2024: FISH4200 – Aquatic Biology (Dr. Susan Wilde, Warnell - Aquatic Sciences)
(vi) 2024: GRSC7770 – Pedagogy (Dr. Kelly Forde, CTL)
(vii) 2022: MARS3450 – Marine Biology (Dr. Jaclyn Saunders, Marine Sciences)
(viii) 2021: MARS3450 – Marine Biology (Dr. Holly Bik. Marine Sciences)
(ix) 2020: MARS3450 – Marine Biology (Dr. Holly Bik, Marine Sciences)

B.5. Supervision of Graduate Student Research

(i) 2026: Madison Ansoategui, M.S., Marine Sciences
(ii) 2025–present: Nikolai Revels, M.S., Marine Sciences
(iii) 2023-2024: Brooke Purves, M.S., Marine Sciences

B.6. Graduate Student Advisory Committee Membership

(i) 2026-present: Darion Deviez, M.S., Marine Sciences
(ii) 2025-present: Bill Peavy, M.S. Marine Sciences
(iii) 2025-present: Emily Jesseph, M.S. Marine Sciences

B.7. Supervision of Undergraduate Research

(i) 2026: Oluchi Ugbajah, Faculty-Mentored Undergrad Research (MARS 4960R),
(ii) 2026: Tori Olsen, Faculty-Mentored Undergrad Research (MARS 4960R),
(iii) 2026: Madalyn Amar, Faculty-Mentored Undergrad Research (MARS 4960R),
(iv) 2026: Marissa Puckett, Faculty-Mentored Undergrad Research (MARS 4960R),
(v) 2025: Samantha Mosley, Faculty-Mentored Undergrad Research (MARS 4960R),
(vi) 2025: Michael Zhou, Faculty-Mentored Undergrad Research (MARS 4960R),
(vii) 2025: Evan Shumaker, Faculty-Mentored Undergrad Research (MARS 4960R),
(viii) 2025: Emily Zhang, GCE LTER Education Internship,
(ix) 2025: Carly Loggins, Faculty-Mentored Undergrad Research (MARS 4960R),
(x) 2025: Brantley Jenkins, Faculty-Mentored Undergrad Research (MARS 4960R),
(xi) 2025: Carmel Serban, Faculty-Mentored Undergrad Research (MARS 4960R),
(xii) 2025: Christa May, Faculty-Mentored Undergrad Research (MARS 4960R),
(xiii) 2024: Darion Deveiz, Faculty-Mentored Undergrad Research (MARS 4960R),
(xiv) 2024: Claire Whitley, Faculty-Mentored Undergrad Research (MARS 4960R),
(xv) 2023: Daniel Sigel (Florida State University), Experiential Learning Internship,
(xvi) 2023: Brooke Purves, Faculty-Mentored Undergrad Research (MARS 4960R),
(xvii) 2022: Alex Daniel (Missouri State University), NSF REU – UBER IV,
(xviii) 2021: Joshua Olaniran (Kennesaw State University), NSF REU – UBER III

B.8. Recognitions in Teaching and Mentoring

(i) 2025: NSF Citizen Science Faculty Mentor ($2000)
(ii) 2024: NSF Citizen Science Curriculum Fellow ($2000)
(iii) 2024-2025: Office of Service Learning, Service-Learning Fellowship
(iv) 2020: CTL Future Faculty Fellows Award
(v) 2020: CTL Outstanding Teaching Assistant Award

Awards won or nominated by graduate student mentees

(i) 2026: CTL Outstanding Teaching Assistant Award, Huck Bagby [awarded]
(ii) 2026: CTL Future Faculty Fellows Award, Huck Bagby [awarded]
(iii) 2026: Marine Sciences Departmental Teaching Award, Huck Bagby [awarded]
(iv) 2025: Marine Sciences Departmental Teaching Award, Giovanna Utsumi [nominated]
(v) 2024: Marine Sciences Departmental Teaching Award, Autumn Baker [awarded]

B.9. Selected Student Success Activities

(i) Brooke Purves (M.S. Marine Sciences) was the first graduate from Dr. Heil's lab in Spring 2024 and her non-thesis project resulted in a publication of educational materials for a local ecotour guide. Brooke accepted a position with the Georgia Aquarium as an Environmental Educator in June 2024.
(ii) Nikolai Revels (M.S. Marine Science) was the first thesis graduate student Dr. Heil recruited that will focus on marine science education research. Nikolai's research will focus on undergraduate marine science degree programs and the formation of ocean identity from our students participating in the Semester@Skidaway domestic field study program.
(iii) Ella Bourbonnais (M.S. Marine Sciences) developed and led a Marine Science Department Earth Day outreach event at Tate Student Center that reached over 300 students.

(iv) Maggie Crawford (B.S. Ocean Science) worked in Dr. Heil's lab to build aquarium/husbandry skills and accepted a Dolphin Trainer position with Gulfarium postgraduation.
(v) Reagan Greene (B.S. Ocean Science) worked with Dr. Heil on outreach initiatives and accepted a Marine Educator position with Tybee Island Marine Science Center.
(vi) Carly Loggins (B.S. Ocean Science) worked with Dr. Heil's lab on aquarium husbandry and social media presences and accepted a Marine Educator position with Gulfarium.
(vii) Lauren Cunningham (B.S. Biology) worked with Dr. Heil's lab to conduct outreach in the Athens community and leveraged this experience to accept the Public Program Internship with UGA Marine Extension and Georgia Sea Grant.

B.10. Teaching-Focused Workshop & Professional Development Participation (past 5 years)

FLC=Faculty Learning Communities
L&D=Learning & Development

(i) 2026: Non-Tenure Track Faculty, CTL FLC
(ii) 2026: Climate Change Across the Curriculum, CTL FLC
(iii) 2025: Non-Tenure Track Faculty, CTL FLC
(iv) 2025: Active Learning Summit, Office of Instruction
(v) 2025: Climate Change Across the Curriculum, CTL FLC
(vi) 2024: Supervision and Burnout: How Supervisors Can Help Their Teams in Times of Stress", UGA Learning & Development (L&D), UGA Student Affairs
(vii) 2024: Service-Learning Research FLC, Office of Service Learning
(viii) 2024: Teaching TAs to TA CTL FLC
(ix) 2024: Generative AI Landscape + AI Tinkering Session, CTL
(x) 2023: Teaching TAs to TA CTL FLC
(xi) 2023: Faculty Leader Series: Supporting Student Success, L&D, Office of Faculty Affairs
(xii) 2023: Faculty Leader Series: Strategies and Tools for Aligning Expectations of Graduate Mentor and Mentee, L&D, Office of the Provost
(xiii) 2023: Navigating Conflict, L&D, Office of Faculty Affairs
(xiv) 2023: Keys to UGA: Mentoring Students, L&D, Office of Faculty Affairs

B.11. Teaching Certifications

(i) 2022: Interdisciplinary University Teaching Certificate, University of Georgia
(ii) 2022: Certificate in Diversity, Equity and Inclusion, University of Georgia
CDI: Emotional Intelligence and Diversity,
CDI: Diversity at UGA: Beyond the Numbers
CDI: Countering Unconscious Bias
CDI: Best Practices for Accommodating Students & Employees with Disabilities
Global Certificate: Global Dawgs
UGA's Non-Discrimination Anti-Harassment Policy and the USG Sexual Misconduct Policy
(iii) 2022: Georgia Project WET K-12 Certificate

B.12. Field/Experiential Learning

(i) 2022-2023: Marine Educator, University of Georgia Marine Extension & Georgia Sea Grant (350 hours)
(ii) 2022: Ocean Discovery Camp Leader, University of Georgia Summer Academy
(iii) 2013-2017: Marine Educator, Saturday at the Sea, Florida State University (200 hours)

B.13. College & Teacher Professional Development

(i) 2024-present: PI - Sapelo Island Georgia Schoolyard Teacher Workshop

(ii) 2024-present: PI - Future Elementary Education Teachers: Investigating Nature (FEET IN)
(iii) 2023-present: Co-PI - My Coast: Georgia Teacher Workshop
(iv) 2023: Co-PI - Rivers to Reefs Teacher Workshop

C. Scholarly Activities & Creative Work (25% then 15%)

C.1. Publications
TC = Total Citations (according to Google Scholar)
IF = Impact Factor of Journal (if applicable)

C.1.1 Books/Theses Authored

1. **Heil, AD.** (2022). A sociocultural perspective: Science epistemology, student learning and instruction in a scientific research writing course. Ph.D. Dissertation, Science Education Department, University of Georgia,
2. **Heil, AD**. (2017). Life history, diet, and reproductive dynamics of the sheepshead (Archosargus probatocephalus) in the Northeastern Gulf of Mexico. M.S. Thesis, Earth Ocean and Atmospheric Science Department, Florida State University. **[TC 6; IF N/A]**

C.1.2 Journal articles (peer reviewed)

1. Lahiri, S., **Heil, AD.**, Daniels, A., Gormally, C., & Brickman, M. (2025). Crafting a biology course for nonmajors: Personas help delineate faculty decision making. *CBE-Life Science Education 24*(3), ar38 1-12. https://doi.org/10.1187/cbe.24-06-0173 **[TC 0; IF 4.1]**
2. **Heil, AD**., Olaniran, J., Gormally, C., & Brickman, M. (2024). It's in the syllabus: What syllabi tell us about introductory biology courses. *CBE - Life Science Education 23*(3), ar37 1-10. https://doi.org/10.1187/cbe.23-05-0081 **[TC 11; IF 4.1]**
3. **Heil, AD** & Lindsay, A. (2024), A tool to characterize learning objectives in marine science education: Marine Science Learning Objectives Tool (MS-LOT). *Current: The Journal of Marine Education* 39(1), 12-22. https://current-journal.com/articles/10.5334/cjme.92 **[TC 0; IF 2.8]**
4. **Heil, AD.** (2024). Florida Goliath Grouper Fishery Case Study. Undergraduate Student Experiences with Citizen Science, QUBES Educational Resources. doi:10.25334/1G5C-Z986
5. **Heil, AD.**, Brickman, M., & Gormally, C. (2023). Low-level learning: Leaving behind Nonscience Majors. *Journal of College Science Teaching 52*(7), 96-102. https://doi.org/10.1080/0047231X.2023.12315884 **[TC 7; IF N/A]**
6. **Heil, AD.** & Youn-Heil, F. (2023). Case: "Baby Shark, Doo Doo Doo Doo Doo Doo", In: Jeong, S., Bryan, L.A., Tippins, D.J., Sexton, C.M. (eds) Navigating Elementary Science Teaching and Learning. Springer Texts in Education. Springer, Cham. https://doi.org/10.1007/978-3-031-33418-4_84
7. Gormally, C. & **Heil, AD**. (2022). A vision for university biology education for non-science majors. *CBE-Life Science Education, 21*(4), es51-9. https://doi.org/10.1187/cbe.21-12-0338 **[TC 40; IF 4.1]**
8. Granneman, J., Baxley, C., Bollinger, M., **Heil, AD**., LeGanke, M., Levine, E., Pearson, W., Pudlak, E., Williams, K., & Gandy, R. (2021). Evaluating the impact of recreational harvest and Management Strategies for bay scallops *Argopecten irradians concentricus* in a Florida Gulf Coasta Management Zone, *Marine and Coastal Fisheries 13*(4), 413-432. https://doi.org/10.1002/mcf2.10161 **[TC 8; IF 1.8]**

9. Brooke, S.D., Watts, M.W., **Heil, AD**., Rhode, M., Mienis, F., Duineveld, G.C.A., Davies, A.J. & Ross, S.W. (2017). Distributions and habitat associations of deep-water corals in Norfolk and Baltimore Canyons, Mid-Atlantic Bight, USA. *Deep Sea Research Part II: Topical Studies in Oceanography 137*, 131-147. https://doi.org/10.1016/j.dsr2.2016.05.008 **[TC 47; IF 3.0]**

C.1.3 Publications Submitted or in Revision (peer-reviewed)

1. **Heil, AD.**, Dziurzynski, A., Revels, N., Sanders, D., Brandes, J. Inquiry into Microplastics in Local Watersheds: A Field-Lab Investigation & Community Science Communication Project. *American Biology Teacher, submitted.*

C.1.4 Other Publications (non-peer reviewed)

1. Zhang, E. & **Heil, AD**. (2025). Crabby Encounters - Exploring marine habitats through crab adaptations. Curriculum developed for Clarke County School District, Athens, GA.
2. Purves, B. & **Heil, AD**. (2025). Dolphins of St. Catherine's. Educational Brochure, created and distributed for Billigan's Ecotour.
3. **Heil, AD.** & Lindsay, A (2023). An unexpected learning opportunity about the ethics of scientific research and sampling. Proceedings of the 2023 Georgia Water Resources Conference, held March 30–31, 2023, at the University of Georgia
4. **Heil, AD**. (2021). Reading Features of Georgia Fish. Curriculum developed for Scientific Research Education Network.
5. **Heil, AD.** (2021). Leading Laboratory Section. Resource for graduate student instructors for Center for Teaching and Learning: https://www.ctl.uga.edu/grad-student/leading-laboratory-sections/
6. Brooke S, Wolf-Watts, M., **Heil, AD.**, Meyer, K., Coykendall, D.K., Rhode, M., Young, C.M., & SW Ross. (2017). Chapter 8: Benthic invertebrate communities. In: *Exploration and Research of Mid-Atlantic Deepwater Hard Bottom Habitats and Shipwrecks with Emphasis on Canyons and Coral Communities. CSA Ocean Sciences (Eds)*. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region. OCS Study BOEM 2017-060 p333-434 plus Appendices

C.2. International & National Presentations

1. Dziurzynski, A., Revels, N., **Heil, AD.** (2026, Oct. 29 – Nov. 1). Identifying microplastics and communicating science through field- and lab-based inquiries [Paper Presentation Submitted]. National Association of Biology Teachers Conference, Dallas, TX, United States.
2. **Heil, AD.** (2026, Feb. 22-27). Teachers stuck in the mud: What we learned from sinking into the salt marsh [Poster Presentation]. Ocean Sciences Meeting, Glasgow, Scotland.
3. **Heil, AD.** (2023, Jul. 23-27). A framework to analyze learning objectives in marine science education [Paper Presentation]. NMEA Conference, Bellingham, WA, United States.
4. Lahiri, S., **Heil, AD.**, Daniels, A., Brickman, M, & Gormally, C. (2023, Jul. 20-23). Crafting a biology course for non-majors: Factors impacting decisions of faculty in terms of socioscientific issues [Paper Presentation]. SABER Conference, Minneapolis, MN, United States.
5. **Heil, AD.** & Kittleson, J. (2023, Mar 7-9). Understanding how a college instructor led science majors to write using a situated learning perspective [Paper Presentation]. NARST Conference, Chicago, IL, United States.

6. **Heil, AD.** & Kittleson, J. (2022, July 7-10). Uncovering perceived weaknesses in biology majors scientific research writing abilities [Poster Presentation]. SABER Conference, MN, United States.
7. Brickman, M., Gormally, C., **Heil, AD**., & Lahiri, S. (2022, Jun. 1-3). Creating validated learning objectives to improve course design and student outcomes in introductory biology [Poster Presentation]. NSF IUSE Summit, Washington D.C., United States.
8. **Heil, AD.** & Luft, J. (2022, Mar. 27-30). "Seriously... I want to teach": Exploring motivations of science majors pursuing teaching careers [Paper Presentation]. NARST Conference, Vancouver, BC, Canada.
9. Zhai, X. & **Heil AD.** (2022, Mar. 27-30). Are linguistic features of written argumentation associated with machine scoring accuracy? [Paper Presentation]. NARST Conference, Vancouver, BC, Canada.
10. Olaniran, J., **Heil, AD.**, & Brickman, M. (2021, Nov. 13). Zeroing in on non-majors [Poster Presentation]. NABT Biology Education Research Symposium, Atlanta, GA, United States.
11. **Heil, AD.**, Brickman, M., & Gormally, C. (2021, Jul. 16). What do faculty want non-majors to know? Characterizing the content, skills, and stated learning objectives from non-major syllabi. [Paper Presentation]. SABER Conference. Conference virtual due to COVID precautions.
12. **Heil, AD.**, Brickman, M., & Gormally, C. (2020, Jul. 24). Low-level learning: Leaving behind most students—the non-science majors [Paper Presentation]. SABER Conference, Twin Cities, MN, United States. Conference virtual due to COVID precautions.
13. Henley, J., Lin, E., **Heil, AD.**, & Atwater, M. (2020, Mar. 15-18). Reliability and validity of an implicit attitude test [Poster Presentation]. CADASE special session at the NARST Annual International Conference. Portland, OR, United States. Conference canceled due to COVID precautions.
14. Granneman, J., Baxley, C., Bollinger, M., **Heil, AD.**, LeGanke, M., Levine, E., Pearson, W., Pudlak, E., Williams, K., & Gandy, R. (2020, Mar. 29- Apr. 2). Evaluation of the recreational harvest of bay scallops (*Argopecten irradians*) in Steinhatchee, Florida [Paper Presentation]. National Shellfish Association Conference, Baltimore, MD, United States. Conference canceled due to COVID precautions.
15. Hardin, E., Granneman, J., Tatem, S., **Heil, AD.**, & Pudlak, E. (2019, Mar. 13-17). Bay scallop restoration: A community effort [Paper Presentation]. Citizen Science Association Conference, Raleigh, NC, United States.
16. Brooke, S., Watts, M., **Heil, AD.**, Rhodes, M., Meinis, F., Duineveld, G., Davies, A., & Ross, S. (2015, Aug. 31 - Sep. 4) Distribution and habitat associations of deep-water corals of the mid-Atlantic canyons [Paper Presentation]. Deep Sea Biology Symposium, Deep Sea Biology Symposium, Aviero, Portugal.
17. Rolfe, S. C., C. F. Cotton, Grubbs, R.D., & **Heil, AD**. (2015, Feb. 16-19). Life history characteristics of two common deep-water dogfishes (*Squalus cubensis* and S. cf. *mitsukurii*) from the northern Gulf of Mexico [Paper Presentation]. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Houston, TX, United States.
18. Cotton, C., Rolfe, S., **Heil, AD.**, & R. D. Grubbs. (2014, Aug. 1). Life history characteristics of two common deep-water dogfishes (*Squalus cubensis* and S. cf. *mitsukurii*) from the northern Gulf of Mexico [Paper Presentation]. Annual Meeting of the American Elasmobranch Society (AES), Chattanooga, TN, United States.

C.3. Regional & Local Presentations

Section IV: Curriculum Vitae: Austin Heil

1. Kostka, B. & **Heil, AD**. (2025, Dec. 8-9). Crest Gauge [Poster Presentation]. Georgia Coastal Ecosystems Annual Meeting, Athens, GA.
2. **Heil, AD**. (2025, Dec. 8). Schoolyard Teacher Workshop. GCE-LTER Annual Meeting. Athens, GA, United States.
3. Kostka, B. & **Heil, AD**. (2025, Nov. 14-16). Coastal Data Dose: Class Warm Up Using Authentic Data [Paper Presentation]. Georgia Association of Marine Educators Conference, Jekyll Island, GA.
4. **Heil, AD.** (2025, Mar. 31). Marine Science for the Community (MARS 3900S) [Poster Presentation]. Public Service & Outreach Annual Meeting. Athens, GA, United States.
5. Sewell, J & **Heil, AD.** (2025, Jan. 30). Bringing marine science research back to the classroom [Paper Presentation]. Georgia Science Teachers Association Conference. Columbus, GA, United States.
6. Kostka, B. & **Heil, AD**. (2024, Oct. 25-27). Measuring high-tide and flooding in your local area using citizen science data [Paper Presentation]. Georgia Association of Marine Educators Conference. St. Simmons, GA, United States.
7. Barriga, P., Black, K., Ford, K., **Heil, AD.**, Ferrari, B., Floyd, R., Lemon, L., Lira, C., Laura, M., Morelock, J., Morris, K., Ovid, D., Simpson, C., & Ward, M. (2024, Apr. 5). Teaching TAs to teach [Poster Presentation]. University Teaching Symposium. Athens, GA, United States.
8. **Heil, AD.**, Townley, A., & Lindsay, A. (2024, Feb. 23-24). My Georgia Coast: Connecting science teachers with informal educators to deepen understanding about issues facing the Georgia coast [Paper Presentation]. Georgia Science Teachers Association Conference. Columbus, GA, United States.
9. Purves, B., Kenworthy, E. & **Heil, AD** (2023, Mar 18). Get involved with Marine Extension and Georgia Sea Grant [Conference Presentation]. Georgia Confluence. Helen, GA, United States.
10. Brown, C., Tarsa, E., Takagagi, K., **Heil, AD.**, & Buck, C. (2023, May 15-17). Experiential learning and undergraduate research [Panelist]. Georgia Climate Conference. Athens, GA, United States.
11. **Heil, AD.** (2023, Mar. 30-31). An unexpected learning opportunity about the ethics of scientific research and sampling [Paper Presentation]. Georgia Water Resources Conference. Athens, GA, United States.
12. Daniels, A., Brickman, M., Gormally, C., Lahari, S., & **Heil, AD**. (2022, Jul. 21). Instructor motivation to change undergraduate non-major biology course content [Poster Presentation]. Undergraduate Biology Education Research Symposium. Athens, GA, United States.
13. **Heil, AD**. (2022, Apr. 5). BYOB: Build your own [ru]bric [Poster Presentation]. Spring Teaching Symposium. Athens, GA, United States.
14. Olaniran, J., **Heil, AD.**, & Brickman, M. (2021, Jul. 22). Zeroing in on non-majors [Poster Presentation]. Undergraduate Biology Education Research Symposium. Athens, GA, United States.
15. **Heil, AD.** (2016, Jun. 15). Spawning in different habitats and the formation of spawning aggregations of the sheepshead (*Archosargus probatocephalus*) in the northeastern Gulf of Mexico [Paper Presentation]. Ecological and Evolutionary Ethology of Fishes, Tallahassee, FL, United States.

16. **Heil, AD.** (2016, Oct. 14). Reproductive dynamics of the sheepshead (Archosargus probatocephalus) in the northeastern Gulf of Mexico [Poster Presentation]. Ecological and Evolutionary Ethology of Fishes Conference, Tallahassee, FL, United States.
17. **Heil, AD.**, C. F. Cotton, & R. D. Grubbs. (2014, Dec. 11). Age and growth of two sympatric deep-water dogfishes (*Squalus cubensis* and S. cf. *mitsukurii*) from the northern Gulf of Mexico [Poster Presentation]. Deep-C Student Research Symposium, Tallahassee, FL, United States.

C.4. Invited Seminars

1. 2025: Service-learning course development. Early Career Teaching Academy Fellowship. UGA Office of Instruction
2. 2025: Bridging the classroom-research divide in students' experiences. UGA Scientists Engaged in Educational Research
3. 2024: Georgia Coastal Ecosystems Outreach. GCE-LTER Annual Meeting. Athens, Georgia.
4. 2024: Undergraduate research experiences in science education. UGA Ocean Initiative Club
5. 2024: Navigating academia. Future Faculty Fellows. UGA CTL
6. 2023: Careers in marine science. Department of Natural Sciences. Coastal College of Georgia
7. 2023: Vision for public programs. Marine Extension and Georgia Sea Grant Annual Meeting. UGA Public Service & Outreach, Marine Extension & Georgia Sea Grant
8. 2021: Professional development for international students. UGA Office for Student Success and Achievement
9. 2021: TA Café: Making teaching fun as TAs. UGA CTL
10. 2021: TA Café: Active Learning as TAs. UGA CTL

C.5. Grants, Awards and Fellowships Received

1. 2026: Co-PI: Collaborative Research: The Trophic Relay: A Theory of Connectivity-Limited Cross-Ecosystem Energy Flow ($895,767), National Science Foundation [pending]
    a. Role: Education Coordinator
2. 2026: Provost and Franklin College International Faculty Travel Recipient ($2500)
3. 2026: PI: FEET IN: Future elementary education teachers investigating nature ($4217.48) – UGA Parent Leadership Council Grant [awarded]
4. 2025: National Science Foundation Citizen Science Peer Mentor ($2000)
5. 2026-2029: Co-PI: "Trophic consequences of climate migrants" ($348,000) National Science Foundation [pending]
    a. Role: Education Coordinator
6. 2025-2026: PI: FEET IN: Future elementary education teachers investigating nature ($4,500) – UGA Parent Leadership Council Grant [awarded]
7. 2025-2029: Co-PI (Education Lead): Long-term ecological research (GCE V)" ($7,542,000) National Science Foundation [awarded]
    a. GCE-LTER Education Coordinator
8. 2025: Student Enrichment Fund Award ($100)
9. 2024-2025: Service-Learning Fellowship ($2500)

10. 2024: National Science Foundation Citizen Science Fellow ($1000)
11. 2023: Co-PI: "My Georgia Coast" ($10,000): UGA Marine Extension & Georgia Sea Grant Program Development Funding [awarded]
12. 2022: Domestic Travel Grant, University of Georgia Graduate School ($400)
13. 2022: Graduate Student Travel Award, Scientists Engaged in Education Research Network ($400)
14. 2022: International Travel Grant, University of Georgia Graduate School ($1000)
15. 2020-2021: Future Faculty Fellowship, Center for Teaching and Learning, Office of Instruction ($450)
16. 2020: Graduate Student Travel Award, National Association of Research in Science Teaching ($500)

D. Service (5%)

D.1. Service to Professional Societies, Organizations or Agencies

- 2025-2026: Educational & Outreach Committee Member. LTER Network
- 2023: Conference Planning Committee. State of the Coast Conference. Savannah, Georgia
- 2022-2023: Chair. Skidaway Marine Science Day. Savannah, Georgia
- 2022-2023: Committee Member. Marine Extension and Georgia Sea Grant Development Committee.
- 2021: Moderator. Center for Undergraduate Research. Athens, Georgia.
- 2019: Moderator. Innovations in Teaching Conference. Athens, Georgia.

D.2. Ad-hoc Manuscript & Proposal Reviews in past 5 years

(Total by year: 2026: 1; 2025: 4; 2024: 3; 2023: 9; 2022: 4)

- 2026: Integrative Organismal Biology: A Journal of the Society for Integrative and Comparative Biology (1)
- 2023-2024: Science Education (2)
- 2023-2024: The Electronic Journal for Research in Science & Mathematics Education (2)
- 2023: International Journal of Science Education (1)
- 2023: CourseSource (2)
- 2022-2025: National Association for Research in Science Teaching (12)
- 2022-2025: Society for Advancements in Biology Education (10)

D.3. Service to the Department, College or University Committees

- 2025: Academic Professional Associate Hiring Committee, Biological Sciences Division, UGA
- 2025- present: Career Readiness Group, Franklin College, University of Georgia
- 2024-present: Faculty Senator, Franklin College of Arts & Science, University of Georgia
- 2024-present: Planning & Evaluation, Franklin College of Arts & Science, University of Georgia
- 2024-present: Curriculum Committee, Marine Sciences Department, University of Georgia
- 2024-present: Inclusive Excellence Committee, Marine Sciences Department, University of Georgia
- 2024: Instructional Laboratory Hiring Committee, Marine Sciences Department, University of Georgia

D.4. Service to Student Organizations

- 2025: Ocean Initiative: University of Georgia: Aquarium visit
- 2025: Georgia Museum of Natural History Student Association: Shrimp Boil
- 2025: Ocean Initiative Club: Critters & Coffee Event
- 2025: Marine Sciences Graduate Student Association – Mentoring workshop
- 2025: Marine Sciences Graduate Student Association –- Faculty outreach coordinator
- 2025: Ocean Initiative Club: Faculty Round Table
- 2024: Marine Sciences Graduate Student Association: Judge for student conference
- 2024: Ocean Initiative: Science education careers talk
- 2023: Presentation Collaboratory Judge
- 2022: President of SciREN GA
- 2021: Treasurer of STEMzone

D.5. Service to the Community

D.5.1. Supervision of Undergraduate Student Outreach & Service

Trained and supervised undergraduate students to lead and facilitate academic and community engagement events in Athens and within the university. The following students were mentored and advised during those events:

- Sydney Michael, Lauren Cunningham, Kennedy Ingram, Reagan Greene, Gabby Cruz, Jenna Brown, Samantha Mosely, Haley Wells, Jude Saunders, Madeline Shell, Alex Daniels, Natalie Hollingsworth, Brantley Jenkins, Tori Olsen, Marissa Puckett, Julia Hernandez, Akeria Bigby, Austin Gentry, Ella Hardman, Elle Glasford, Oluchi Ugbajah

D.5.2. Supervision of Graduate Student Outreach & Service

Trained and supervised graduate students to lead and facilitate academic and community engagement events in Athens and within the university. The following students were mentored and advised during those events:

- Angelica Dziurzynski Carl Gibson, Zane Burris, Min Han, Michelle Demers, Randall Priest, Nikolai Revels, Emily Jesseph, Jacob Simon.

D.5.3 Sea Dawgs Outreach

2025 Summary*:* Organized and led 20 outreach events reaching 2,500+ participants including STEM nights, science festivals, and community programs across Athens-Clarke Count as part of broader impacts of GCE V.

Selected Events

- Sandy Creek Nature Center Athens Water Festival
- UGA Summer Academy Environmental Science Summer Camp
- World Oceans Day: Sandy Creek Nature Center (led by Marine Sciences Ph.D. student M. Demers)
- Earth Day Event at Tate Student Center (led by Marine Sciences M.S. student E. Bourbonnais)

2023-2024 Summary*:* Organized and led over 40 outreach events reaching 4,500+ participants including STEM nights, science festivals, and community programs across Athens-Clarke County.

Selected Events

- Oconee County Library: STEM Extravaganza (led by Marine Science M.S. student A. Baker)
- Earth Day Event (led by Ocean Science B.S. student R. Greene)
- ACC Library Summer Event (led by Ocean Science B.S. student C. Whitely)

D.5.4. Marine Extension and Georgia Sea Grant Public Programs

2022-2023: (Summary: 15 events; 12,800 people; 7 undergraduates, 4 interns)

E. Administration (50%)

E.1. Laboratory Coordination

As Director of Marine Sciences Instructional Laboratory, I have been an instructor of record for non-major laboratory courses (MARS1010L, MARS1020L, see Table 2) and supervised Graduate Teaching Assistants and Teaching Interns (MARS7360) in the teaching laboratory.

Table 2: Summary of Laboratory Courses Supervised at UGA since Fall 2023

Course	% Credit	Title	Term	Student Enroll.	Cr.	Total Cr.	TAs Supervised
MARS 1010L	100	Intro to the Marine Environment Lab	FA23	87	1	87	3
MARS 1020L	100	Intro to Marine Biology Lab	SP24	53	1	53	2
MARS 1010L	100	Intro to the Marine Environment Lab	FA24	78	1	78	3
MARS 1020L	100	Intro to Marine Biology Lab	SP25	83	1	83	3
MARS 1010L	30	Intro to the Marine Environment Lab	FA25	80	1	80	3
MARS 1020L	100	Intro to Marine Biology Lab	SP26	67	1	67	3
MARS 1020L	100	Intro to Marine Biology Lab (Domestic Field Study)	SP26	14	1	14	1
			Totals	**462**	**7**	**462**	**18**

E.2. Supervision of Graduate Student Teaching Assistants

(i) Angelica Dziurzynski (M.S. 2024), for MARS 1010L Fall 2023
(ii) Autumn Baker (M.S. 2025), for MARS 1010L Fall 2023 and MARS 7360
(iii) Ratish Jha (M.S. 2024), for MARS 1010L Fall 2023
(iv) Hunter Powell (M.S. 2025), for MARS 1020L Spring 2024 and for MARS 1010L Fall 2025
(v) Giovanna Utsumi (Ph.D. 2025), for MARS 1020L Spring 2024 and Spring 2025
(vi) McKenzie Powers (Ph.D), for MARS 1010L Fall 2024
(vii) Jacob Simon (Ph.D), for MARS 1010L Fall 2024
(viii) Moussa Alaqsum (Ph.D), for MARS 1010L Fall 2024
(ix) Huck Bagby (Ph.D), for MARS 1020L Spring 2025
(x) Zac Marinelli (Ph.D), for MARS 1020L Spring 2025
(xi) Nikolai Revels (M.S), for MARS 1010L Fall 2025 and for MARS 1020L Spring 2026
(xii) Shahram Asgari (Ph.D), for MARS 1010L Fall 2025
(xiii) Darion Deviez (M.S), for MARS 1020L Spring 2026
(xiv) Britany Guo (Ph.D), for MARS 1020L Spring 2026

E.3. Graduate Student Teaching Mentorship and Student Success Activities

(i) Autumn Baker (M.S. 2025), Curriculum development and job application (MARS 7360).
(ii) Hunter Powell (M.S. 2025), Guest lecture for MARS 1020 in Spring 2024 and classroom observation for MARS 1020L in Fall 2025.
(iii) Giovanna Utsumi (Ph.D. 2025), Guest lecture for MARS 1020 in Spring 2024 and Spring 2025, classroom observation for MARS 1020L in Spring 2025.
(iv) Jacob Simon (Ph.D., 2027), Guest lecture for MARS 1020 in Spring 2025 and classroom observation for MARS 1020L in Fall 2024 (MARS 7360).
(v) McKenzie Powers (Ph.D.), Guest lecture for MARS 1020 in Spring 2025 and classroom observation for MARS 1020L in Fall 2024 (MARS 7360).
(vi) Huck Bagby (Ph.D.), Teaching Mentor for Brendan as he completes the Future Faculty Fellows Program (3FP) through the Center for Teaching and Learning (CTL) at UGA, Guest lecture for MARS 1020 in Spring 2025 (MARS 7360).
(vii) Abigail Johnson (Post-doctoral student, 2024), Guest lecture for MARS 1020 in Spring 2024, reference for UGA Academic Professional position with Biology
(viii) Hannah Budroe (Ph.D.), Guest lecture for MARS 1020 in Spring 2026 (MARS 7360).
(ix) Lucia Ramirez Joseph (Ph.D), Guest lecture for MARS 1020 in Spring 2026 (MARS 7360).

E.4. Re/development of Laboratory Courses

(i) MARS 1010L: Developed 13 new laboratory modules (Fall 2023)
(ii) MARS 1020L: Developed 13 new laboratory modules (Spring 2024)
(iii) MARS 1010L: Developed a Sapelo Island Domestic Field Study program (Fall 2026)
- This domestic field study program scheduled to launch Fall 2026 will satisfy general education and experiential learning requirements and will partner with UGA Marine Institute on Sapelo Island.

(iv) MARS 1020L: Developed a Marine Extension Domestic Field Study program (Spring 2026)
- This domestic field study program will satisfy general education and experiential learning requirements, partnering with our Skidaway campus and Marine Extension & Georgia Sea Grant. Offered for the first time in Spring 2026.

E.5. Publications Related to Administration

1. **Heil, AD.**, Dziurzynski, A., Revels, N., Sanders, D., Brandes, J. Inquiry into Microplastics in Local Watersheds: A Field-Lab Investigation & Community Science Communication Project. *American Biology Teacher, submitted.*

2. **Heil, AD.** (2024). Florida Goliath Grouper Fishery Case Study. Undergraduate Student Experiences with Citizen Science, QUBES Educational Resources. doi:10.25334/1G5C-Z986

E.6. International Presentations Related to Administration

1. Dziurzynski, A., Revels, N., **Heil, AD.** (2026, Oct. 29 – Nov. 1). Identifying microplastics and communicating science through field- and lab-based inquiries [Paper Presentation Submitted]. National Association of Biology Teachers Conference, Dallas, TX, United States.

E.7. Instructional Laboratory Technicians Supervised

(i) 2023-2024: Randy Priest
(ii) 2024-present: Angelica Dziurzynski

E.8. Budgets Managed

Instructional budgets for MARS 1010L and MARS 1020L from student fees are listed in Table 3 along with a brief description of how they were used.

Table 3: Instructional budgets managed for Marine Sciences laboratory courses.

Year	Budget ($)	Relevant Purchases

2023	7,308	Supplies for new microplastics modules.
2024	11,670	Serviced all 30 microscopes for the first time since 2015. Supplies to support independent inquiry experiments for MARS 1020L.
2025	13,858	Equipment and supplies to support aquarium/husbandry efforts critical to service and instruction of our lab. Partnership with Marine Extension and Georgia Sea Grant to collect organisms (current cost = 500, previous collection trips = $2500).
2026	6,794	Lights to support natural circadian rhythms of organisms and support undergraduate research projects
Total: $39,630		

E.9. Permits, Certifications and Inspections

I am responsible for maintaining/securing laboratory permits, certifications and inspections (Table 4).

Table 4: Acquired permits, certification and inspections for the Instructional Teaching Laboratory.

Year	Permit/Certification	Rationale
2024-Present	Institutional Animal Care and Use Committee: Animal Use Protocol	Acquired mandatory Animal Use Protocol through IACUC to support the use of vertebrates in MARS lab instruction and outreach. Passed all IACUC inspections.
2024-Present	Department of Natural Resources Wildlife Exhibition Permit	Required permit to exhibit living marine organisms
2024-Present	Department of Natural Resources Collection Permit	Collaborated with Marine Extension and Georgia Sea Grant's existing collection permit. Allowed us to reduce purchasing of animals from vendors and leverage existing relationships at UGA.
2024-Present	Office of Research Integrity & Safety Chemical Safety	Removed nearly 15 years of accumulated chemicals and chemical waste from the lab. Passed all Chemical Safety inspections for the first time since 2020.

E.10. Living Organisms Supported

I am responsible for collection, care/husbandry of marine organisms used for teaching efforts (Table 5).

Table 5: Collected organisms used for teaching-related efforts.

Organisms	Collection Method
Turtle grass, Caulerpa, Volvox, Chlorella	Vendor
Anemone, coral, southern Flounder, horse conch, lightning whelk, crown conchs, orange sea star, spiny urchin, ocellated moray eel, stingray*	Inherited from previous faculty
Oysters, mussels, razor clams, stone crabs, blue crabs, spider crabs, mud crabs, fiddler crabs, hermit crabs, horseshoe crabs, common sea star, sea robin, striped burrfish, oyster toadfish, sea bass, spadefish, ocellated flounder, hake	In collaboration with Marine Extension and Georgia Sea Grant

*Relocated to Tennessee Aquarium