Teaching Philosophy

Dr. Sajna V Hussain
Fishery Oceanography Lab - CEOAS - OSU
Ocean Administration Building, 104
101, SW 26th Street Corvallis, Oregon-97331, USA
+1(541)2313906, (+91) 9846301931
sajnavhussain@gmail.com

Selection Committee
College of Marine Sciences and Aquatic Biology,
University of Khorfakkan,
Al Jaradia - Sharjah, UAE

April 26, 2025

Dear Selection Committee,

As an educator, I believe in fostering a dynamic, inclusive, and inquiry-driven environment that not only delivers knowledge but transforms students into independent thinkers and compassionate scientists. My teaching philosophy is rooted in the principle of "Growing with Teaching," a mindset I embraced when I first began tutoring school students out of pure passion. Over time, this seed of passion has blossomed into a deep professional commitment to higher education and mentorship.

After graduating, I began my teaching journey as a Guest Lecturer. I immersed myself in Biosciences, not only as a researcher but also as an educator, striving to make complex concepts accessible, meaningful, and exciting. Throughout my tenure, I've taught a broad range of subjects, including Cell Biology, Animal Physiology, Developmental Biology, Fishery Resources and Management, Research Methodology, Biostatistics and Environmental Science. This experience, spanning both undergraduate and postgraduate levels, has shaped a teaching style grounded in clarity, structure, and compassion.

One of my core goals is to inspire curiosity and cultivate a lifelong love for learning. I believe that when students see the relevance of what they're learning especially in fields like climate change and marine science they become more engaged and invested. I structure my sessions to balance conceptual clarity with application, integrating real-world challenges, case studies, and contemporary issues to provide context and deepen understanding.

My classroom approach is interactive, participatory, and student-centered. I often incorporate group discussions, peer reviews, and visual storytelling through animations or videos. These techniques not only stimulate curiosity but also foster a sense of ownership and creativity in learning. I encourage students to present their ideas, use the latest technology, and think critically about how science connects to their lives and futures. I also guide them in exploring career paths and real-world opportunities, helping them see beyond the textbook into the possibilities that await.

I aim to ensure all students, regardless of background, feel seen, heard, and supported in their learning journey. I'm deeply committed to inclusivity and individual attention, recognizing that emotional engagement plays a significant role in academic success. By being approachable and responsive, I try to build relationships that extend beyond lectures — offering mentorship, encouragement, and guidance as needed.

One of the most meaningful experiences in my teaching career came when a former student joined my research institution after many years and approached me. Initially, I didn't recognize him, as time had changed his appearance. But when he shared how our earlier interactions had influenced his path toward a career in science, I was overwhelmed with joy and gratitude. That moment reminded me that the impact of a teacher often unfolds silently, over time, and far beyond the classroom walls.

In addition to traditional teaching, I've had the privilege of supporting postgraduate and PhD scholars in research areas such as climate change and fisheries. As a researcher and educator, guiding students in scientific writing, data analysis, and critical thinking has been particularly rewarding. I emphasize clarity in communication and often facilitate structured peer-review sessions to strengthen their writing and analytical abilities. Watching students evolve from uncertainty to confidence, especially in research, is one of the most fulfilling parts of my role.

Looking ahead, I recognize the increasing importance of interdisciplinary thinking and technological fluency in modern science. I am committed to integrating programming and AI tools into the curriculum, particularly in areas like marine ecology and environmental modeling. My goal is to ensure that students not only understand scientific theories but also develop the digital and analytical skills needed to thrive in evolving research landscapes.

As a marine scientist, I place particular emphasis on the sustainable management of marine resources, recognizing their immense ecological, economic, and cultural value. Our oceans are not only sources of food and livelihood but also play a critical role in climate regulation and global biodiversity. It is time to act decisively in the face of a changing climate to protect our coasts, coral reefs, and fisheries through Nature-based Solutions (NbS), Ecosystem-based Adaptation (EbA), resilient technologies, and community-driven mitigation strategies. I am deeply committed to raising awareness and equipping the next generation of scientists and leaders with the tools, mindset, and sense of responsibility to become guardians of our marine environments and champions of a sustainable future.

Yours Sincerely,

Sajna Hussain