Statement of Teaching Philosophy and Experience

My teaching philosophy is rooted in the belief that science education is not only about transmitting knowledge but also about cultivating curiosity, critical thinking, and resilience in students. As a Teaching Assistant during my Ph.D. at Christ University, I guided laboratory sessions in **immunology, plant physiology, biochemistry, and human genetics**. In these settings, I saw how hands-on engagement—whether through experimental design, data interpretation, or problem-solving—helped students build confidence as independent learners. My role was not only to clarify concepts, but to encourage students to ask deeper questions, explore connections, and take intellectual risks in a supportive environment.

I view teaching as a partnership. While I provide structured guidance, I expect students to engage actively and take ownership of their learning. For instance, I encouraged students to design small-scale experiments in plant physiology labs, fostering both independence and responsibility for outcomes. I found that even in basic tasks, when students are given the freedom to hypothesize, test, and reflect, their sense of accomplishment and understanding grows profoundly.

Equally important to me is the integration of **interdisciplinary perspectives**. With an academic background spanning **botany, ethnobotany, and bioinformatics**, I emphasize the interconnectedness of scientific inquiry with cultural knowledge, ecological contexts, and computational tools. This holistic approach mirrors the liberal arts spirit at Deep Springs and prepares students to appreciate science not as an isolated field, but as part of a broader intellectual landscape.

At Deep Springs, I would bring this same commitment to designing small, discussion-driven courses that balance specialized content with accessible, integrative perspectives. I am particularly drawn to the College's **three pillars of academics, self-governance, and labor**, as they echo my own conviction that education should develop not only intellectual skills but also character, resilience, and a sense of shared responsibility. I aspire to be a teacher who models enthusiasm for discovery, sets high expectations, and supports students as they grow both as scholars and as members of a close-knit community.

Dr. Aratrika Bhadra