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# Teaching Statement

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My teaching philosophy is guided by the belief that science education at a liberal arts college should be both accessible and transformative. I strive to make astronomy and physics approachable to students of all backgrounds, helping them build confidence in their ability to understand and apply scientific concepts. Whether teaching an introductory course for non-majors or a core physics class for majors, I emphasize clarity, curiosity, and connections between the material and the broader human pursuit of knowledge.

Students consistently describe my teaching as clear, organized, and approachable. I use multiple modes of explanation—mathematical, conceptual, and visual—to make abstract concepts tangible. I integrate interactive demonstrations, real-world analogies, and group problem-solving to foster engagement. Evaluations highlight that I "made physics interesting and less intimidating," that I "explained concepts in multiple ways until everyone understood," and that I was "always willing to help."

At a liberal arts institution, I view teaching not just as transmitting content but as cultivating broader habits of mind: critical thinking, quantitative reasoning, and an appreciation for the relevance of science. Even in general education courses, I encourage students to draw connections across disciplines and apply scientific reasoning in their daily lives. For majors, I provide opportunities to engage with challenging problems that require creativity, collaboration, and perseverance.

Research also plays an important role in a liberal arts context. My work on black hole—galaxy connections and the application of AI/ML methods is accessible to undergraduates through projects such as galaxy survey analysis or developing simple machine learning models. These experiences provide students with transferable skills in computation and data analysis while deepening their appreciation of science as a process of discovery.

Ultimately, my goal is to empower students to see themselves as capable learners and critical thinkers. At a liberal arts college, where mentorship is central, I am eager to engage students both inside and outside the classroom to foster intellectual growth and curiosity.

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