Endorsement Checklist Essay

The coursework outlined in my endorsement checklist has provided me with a comprehensive foundation in biological sciences, chemistry, and related disciplines, equipping me with the knowledge and skills necessary to teach biology effectively at the high school level. With a total of 217 credits across scientific subject areas, my education has been both broad and rigorous, emphasizing content mastery, scientific inquiry, and true to Evergreens spirit, interdisciplinary connections, essential for high school instruction.

A background in algebra, probability, and statistics has sharpened my ability to interpret and teach quantitative concepts, such as data analysis in biology labs or modeling ecological systems. Credits in Introductory Statistics and Algebraic Thinking for Science have prepared me to guide students in applying math to biological phenomena, an essential skill in modern biology.

The coursework in ecology and ecosystems, including studies in Fungal Biology, Lichen Taxonomy, and Microbial Ecology, has cultivated a deep understanding of the interdependence of living organisms and their environments, a passion for taxonomy, a developed comprehension of DNA, and a strong grasp of PCR techniques and analysis. I am prepared to engage students in discussions about environmental sustainability and biodiversity, integrating fieldwork and real-world examples into the classroom.

In botany and zoology, hands-on courses like Field Botany, Ornithology, and Avian Research Methods have provided practical skills that will enrich classroom labs and outdoor educational experiences. Similarly, courses in anatomy and physiology and human biology, such as Anatomy and Physiology I and II with Laboratory, prepare me to deliver engaging lessons about the human body's structure and function, a topic that often sparks student interest.

Advanced coursework in cell biology, genetics, and evolution, including Molecular Biology and Developmental Biology Laboratory, ensures I can present these foundational topics with depth and clarity. Additionally, my chemistry coursework, from Introductory Chemistry to Organic Chemistry with Laboratory, allows me to integrate biochemical principles into biology lessons, highlighting the molecular underpinnings of life.

Finally, courses like Scientific Communication, Fungal Food Justice, and Environmental Applications of Fungi have prepared me to incorporate contemporary issues into my teaching. These subjects have taught me to connect biology to pressing societal challenges, such as climate change, food security, and public health, fostering critical thinking in students related to personal and global health.

This diverse and strong academic foundation not only prepares me to teach biology at a high school level, but also to inspire curiosity, critical thinking, and an appreciation for science in my future students. My coursework emphasizes both theoretical knowledge and practical application, aligning with state and national biology education standards.