Statement of Teaching Philosophy and Experience *Eric T. Simandle, Ph.D.*

Teaching Philosophy

My teaching philosophy aligns closely with the Deep Springs mission. It is experiential, dialogic, and student-centered: students learn best when they are not only recipients of knowledge but also active participants in inquiry, critique, and discovery.

I view teaching as a collaborative enterprise. In seminar settings, students and I interrogate ideas, test evidence, and refine arguments. A seminar on logic and reasoning may begin with T. Edward Damer's Attacking Faulty Reasoning, but quickly becomes a student-led workshop where peers critique one another's arguments, practicing the intellectual humility of both giving and receiving constructive criticism. This habit of critique prepares students for the democratic practice of self-governance, a pillar of Deep Springs' philosophy.

My teaching is also experiential. At Paul Smith's College, I led students into the field to study amphibians, reptiles, and ecosystems, turning natural history into living laboratories. At Deep Springs, where I led an independent study on the valley's amphibians and co-taught a seminar on black toad conservation, I saw firsthand how the desert itself is a teacher. The combination of academic rigor, place-based learning, and shared work fosters deep understanding and lasting engagement.

I continually refine my pedagogy by integrating evidence-based practices. In 2017, I participated in the Conservation Teaching and Learning Studio at the American Museum of Natural History (Center for Biodiversity and Conservation, NCEP), focusing on active learning and the assessment of critical thinking. That experience reinforced my commitment to methods that foster not just content mastery but transferable skills in reasoning, problem-solving, and collaboration.

Teaching Experience

- Conservation Biology (seminar + lab)
- Herpetology (developed de novo; field and lab components)
- Comparative Vertebrate Anatomy
- Ecology and Advanced Ecology
- Biology I & II laboratories
- Independent Studies (e.g., Deep Springs amphibian and reptile field study)

I have mentored more than 15 senior theses and capstone projects, guiding students from hypothesis development to interpretation and writing. Many projects became conference presentations and publications.

Service and Governance

As Faculty Senate President (two terms), I represented ~50 faculty in governance, budgeting, and academic development. I view governance as pedagogy: it models deliberation, responsibility, and collaboration—skills central to the Deep Springs tradition of self-governance.

Research as Teaching

My student-centered research integrates conservation biology, animal physiology, and physiological ecology in three areas: (1) Conservation of Great Basin amphibians—especially the black toad of Deep Springs Valley—through long-term monitoring and habitat assessment; (2) Toxin ecology—quantifying tetrodotoxin in salamanders and newts, with opportunities to extend to Taricha in California; (3) Animal perception and the non-visible spectrum—how UV and IR influence heat balance, signaling, and ecology. In all cases, students co-design studies, conduct fieldwork, analyze data, and disseminate findings.

Looking Ahead at Deep Springs

I envision teaching and scholarship as mutually reinforcing. Courses like Reason and Responsibility, Life in Extreme Environments, and Nature, Policy, and Power cultivate discernment, resilience, and civic responsibility. Research on the black toad grounds scientific study in the very place students live and work, uniting academics, labor, and community—precisely the education L. L. Nunn imagined.