

June 24th, 2013

Dear Susan Handy,

My name is Micah. I'm soon to be a UC Davis-trained wildlife biologist. I've recently taken the class Ecology and Management of Sierra Nevada Rivers (ESP 190), and wanted to submit my thoughts to hopefully persuade you to continue the present curriculum.

Most of the wildlife biology classes I have taken here at UC Davis focused on the biotic side of the environment, and only scratched the surface now and again at the abiotic factors affecting them. Until I took ESP 190, I never seriously considered the abiotic factor. The ESP 190 class provided me with a holistic approach to the analysis of the interplay between the biotic and abiotic processes in the environment; it was an experience that I had not yet encountered at UC Davis, but I have found that it is critical to my understanding of broad-scale concepts in both time and space as they pertain to geology, biology and climatology.

During my experiences working on the South Bay Salt Pond Restoration Project for the past few years, I have come to understand that the cross training presented in this course is more representative of the collaborative work environments found both within academia and outside of academia. We, as the future scientists of the world, must be properly prepared and trained for how things occur outside of the classroom setting. Without that knowledge, we risk limiting ourselves and our projects, and becoming poor representatives of the UC Davis scientific community.

The breadth of this class grows still wider when considering the students. Dr. Viers and his stalwart staff displayed exemplary foresight when choosing students with academically diverse backgrounds. Much like my favorite confectionary, Reeses Peanut Butter Cups, our synergistic collaboration was a teaching force multiplier. For instance, thanks to Kaya, a fellow student (and many others), I can identify many riparian trees and can tell the differences between rushes, reeds, and grasses (by the hand ditty "reeds have edges - rushes are round - grasses have nodes that are close to the ground"). This could be the difference between success and failure when "keying-out" a species. If I had a question about a topic outside of my field, I could always ask my fellow student expert. This one-on-one training was not the only thing bulldozing neural pathways in my gray matter.

Practical application of data collection methods played a large roll in the lesson plan. There is a large difference here, in my mind, between class lessons and "learning by doing". The textbook world does not always align with the world of earth and sky, and it is there where many a scientist could unwittingly go asunder and botch the data. For instance, just this morning my professor in statistical analysis of variance was declaring the importance of proper data collection, which was emphasized and well-taught in ESP 190.

But still, there's more. Having un-skewed data is great and necessary for accurate inferences. A simple powerpoint presentation may have been able to set up the building blocks of correct data collection, but the class time alone is far from sufficient for understanding. Going through the motions of collecting data in the field puts the active environmental process into a new context, which is essential for proper scientific understanding and analysis of the project.

Is that all? Not by a long shot.

I've recently researched the history of the computer while writing a paper about Google, Inc. I was astonished, for good or for ill, by the exponential evolution of this machine and its epidemical grasp on the global population. For this reason, maybe one of the most important lessons we learned in ESP 190 was how to communicate science through a multimedia approach. For years I've toiled with understanding that a change in people's behavior would be the best chance of mitigating the impacts of global climate change. Unfortunately, faith in humanity has never been my strong suit,

and I feared our globe was doomed, because no one would ever change. But today, thanks to ESP 190, I can say that with the confluence of ubiquitous technology and a clear, concise message, a massive shift in perception amongst the population could be attained. And, thanks to this class, I feel I am properly equipped to present that message.

Please, take it from me, the number one “doggy downer”, my mountain was moved. I am a nobody, and at the same time I am a soldier of contemplation, and with a little luck, a soldier of logic. Please. Change more minds. Give hope. Have heart. Don’t kill ESP 190.

Now, with faith and sincerity,

Micah Bisson