



Evolutionary Gem Series: Capturing Students' Creativity, Passion, and Curiosity

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It is an honour, and it gives me great pleasure to introduce a new series of class work submitted to the writing module in Biology 2290F/G, Scientific Methods in Biology. I teach the writing module, but this module is only one of four that students experience during the 12-week curriculum. As the name suggests, students learn about biological methods as well as lab techniques, critical thinking, problem solving, research, experimental design, evaluation of data, and communication.

In the spring of 2015, I introduced a new capstone project that incorporates student -directed curriculum. While students acquire skills in research and communication, they direct the content of their learning. The capstone project requires students to submit an essay illustrating a principle of evolution. The assignment is aptly named "Evolutionary GEM #16."

The inspiration for this new assignment has its beginnings in January 2009, also known in biological circles as "Darwin's Year." The pre-eminent scientific journal, *Nature*, published an open-access document titled "[15 Evolutionary Gems.](#)" The editors sought to bring to life the "breadth, depth, and power of evolutionary thinking." Led by their own passions and curiosity, my students move beyond listening to lectures and learning about biology; they embrace fully the opportunity to be a biologist. I hope that you, the reader, enjoy this series!