## Before Class Discussion Board Prompts for Evolution & Behavior

## Jennifer Savoie, Hunter College

About once a week there is a discussion board about the upcoming material that the students are required to respond to before class starts. These are low stakes assignments that are graded as complete/incomplete. Students are required to complete 10 out of 12 in order to receive full credit. I then use the posts to support an in-class discussion of the topic.

Content Area	Discussion Board Prompt
Evolution General - history (Lamark, Darwin), evidence (fossils, homology)	What was known about creation and evolution before Darwin? What did most people think? (1820s)
Natural Selection	Give and explain an example of convergent evolution (pictures are appreciated). Do not use the example of flight in birds and bats discussed in class.
Population Genetics & Mechanisms of Evolution - Genetic drift, mutation, gene flow, Hardy-weinberg equilibrium	Share an example of a species population that has experienced the bottleneck effect or founder effect.
Sexual Selection	Think of an example of intersexual or intrasexual competition in early OR modern human society and explain why your example fits this definition. (This is something you are theorizing about, it does not have to be something backed by research)
Explaining Behavior - Tinbergen's 4 Questions	Provide an example of a sleeping behavior of a non-human animal that you find interesting.
Mating Systems	We do not see a monogamous mating system in any of our closest ape relatives, however, we often think of humans as monogamous. Do you

	think humans are monogamous and why do you think this would have evolved?
Parenting Behaviors	<ul> <li>For this prompt, you need to give 2 examples:</li> <li>1. Choose a species with no/low parental care behaviors - briefly describe the species and the parental behaviors they perform</li> <li>2. Choose a species with high parental care behaviors - briefly describe the species and the parental behaviors they perform</li> </ul>
Communication	Describe an interesting example of communication between a human and a non-human animal. This can be a famous example (eg., Koko the gorilla), something you have seen on social media, an example from your own life, etc.
Kinship & Altruism	Only a few mammal species experience menopause: humans, killer whales, and pilot whales. Why might genes that cut a female's reproduction period short or extend a female's lifespan past reproductive age (menopause) be favored by natural selection?
Social Behaviors & Cooperation	Living in a group could bring several advantages and disadvantages to an individual. What are some of the costs and benefits of group living for mammals?
Cognition	Briefly describe one experience you've had with an animal where it made you question what it was thinking. It could be a pet, zoo animal, or wildlife that you observed.
Human Evolution & Behavior	What at the Museum of Natural History did you find interesting? (Should be related to class material)
Final Exam Review	Create a short answer or multiple choice question that you think could be on the final exam. Then provide an answer to that question.