

Sample Assignments: Final Paper given in BIOL 280, Evolution

This paper was assigned after 3 class discussions that required students to read an assigned scientific article and its corresponding public interest article.

FINAL PAPER GUIDELINES BIOL 280: Evolution

Overview: Write a public interest piece (e.g. ScienceDaily article) for a scientific article on the evolutionary consequences of invasive species or climate change.

Purpose: To synthesize, summarize, and simplify content from a science research article to illustrate your understanding of the study and to gain an appreciation for the importance and sometimes challenging aspect of communicating science to the general public.

Articles: Choose one of the following articles to write a public interest piece for.

Options related to climate change:

- Phenotypic plasticity and adaptive evolution contribute to advancing flowering phenology in response to climate change (Anderson et al. 2012)
- Antagonistic coevolution limits population persistence of a virus in a thermally deteriorating environment (Zhang & Buckling 2011)
- Adaptive evolution of a key phytoplankton species to ocean acidification (Lohbeck et al. 2012)

Options related to invasive species:

- Can things get worse when an invasive species hybridizes? The harlequin ladybird *Harmonia axyridis* in France as a case study (Facon et al. 2011)
- Patterns of DNA methylation throughout a range expansion of an introduced songbird (Liebl et al. 2013)

**I strongly encourage you to read the supplementary material associated with your article (see link at end of article)*

Stipulations: Your paper should be written individually and be of publishable quality (see "Example" on Blackboard). Limit your paper to no more than 1,000 words (~3 pages, double spaced, 12 pt. Times New Roman font), but no less than 500 words (excluding journal reference).

A note on plagiarism: EVERYTHING must be in your own words. No quotes. For public interest articles you do not need to provide an in-text citation every time you reference the authors' ideas, but make sure you provide the full citation for the article at the end (see formatting in "Example"). You will be submitting via

SafeAssign on Blackboard, which will highlight any plagiarized phrases from published sources or from the papers submitted by your peers.

Submission: Please change your file name to "lastname_paper.docx" before uploading to Blackboard. Only 1 attempt permitted. No hardcopies will be accepted. **DUE by 8 AM April 30th.**

Tentative Rubric: You will be graded on the content, accuracy and quality of your writing.

	Possible Points	Points Earned
Title (encompasses essence of paper's take-home message and is creative)	3	
Photo (relevancy, photo credit shown, caption)	2	
Introduction paragraph (intriguing to broad audience and introduces topic / context of study)	2	
Body (Objective and purpose of research clearly stated; links study to one or more general evolutionary theories / principles)	4	
Body (Interesting life history characteristics of study organisms or unique features of study system mentioned)	3	
Body (Important results are highlighted)	5	
Conclusion paragraph (Implications of research summarized)	5	
Conclusion paragraph (Proposed future studies inspired by the findings of this research stated)	3	
Journal reference (correct citation format)	2	
Style (study is made interesting without compromising accuracy and easily understood by the educated public)	4	
Writing (clear organization, smooth transitions between ideas, proper grammar, etc.)	5	
Format (obeyed stipulations of assignment and did not use direct quotes unless referencing an interview with the authors)	2	
TOTAL	40	

**This rubric is subject to change as deemed necessary by the professor*