



Course Tag Reflection Exemplar **Communication Skills**

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BIO 459: Plants & People

Identify the course learning objectives in the syllabus that are clearly aligned to Communication Skills and respective assignment(s).

1. Students will be able to describe the differences between genetically modified and non-genetically modified plants.
2. Students will be able to compare/assess prior knowledge about food production in relation to the science content (plants/agriculture) they learn.
3. Students will be able to explain biochemical plant phenomena (and maybe even understand how great plants are).
4. Students will be able explain (historically and scientifically) about the foods and fuels human populations depend on.
5. Students will be able to analyze a paper by: figuring out the main points, reading and interpreting figures, assessing the data, and applying critical thinking.

Explain the connection between specific assignment(s) and Communication Skills. At least 30% of the course grade must engage students in the selected competency for the course to be tagged.

Students participate in presentations, as well as an associated written assignment, in which they summarize, interpret and critique scientific writing. They also write a position paper and debate a topic in the area of plant biology.

They also produce either a final paper or video that requires researching a specific plant biology invention (i.e. a crop produced by breeding or biotechnology) and searching the literature to answer questions about this invention. The students apply your understanding of plant biotechnology and general biology, as well as research skills and reading scientific papers to produce a final product.

Describe in detail the instructional strategies faculty use to intentionally teach Communication Skills in the course.

I have the percentage for the assignments. Students participate in presentations (5%+15%), as well as an associated written assignment (5%), in which they summarize, interpret and critique scientific writing. They also write a position paper (10%) and debate (5%) a topic in the area of plant biology.

They also produce either a final paper or video (15%) that requires researching a specific plant biology invention (i.e. a crop produced by breeding or biotechnology) and searching the literature to answer questions about this invention. The students apply your understanding of plant biotechnology and general biology, as well as research skills and reading scientific papers to produce a final product.

Describe the feedback tool(s) faculty use to support students' competency development on Communication Skills.

I provide feedback using rubrics developed with the support of a Discipline Based Education Researcher through the HHMI Course Transformation Grant. For the summary paper associated with the presentation on a scientific paper, the students also participate in peer review using a provided rubric.