

BIOL-UA 995 Becoming a Scientist

Instructor:

Gloria Corruzzi

Course Description:

Pursuing a scientific career is intellectually exciting and practically important to society. Succeeding in a scientific career is both an art and a science. Being successful requires intelligence and expertise in the laboratory, but equally important, it requires skills in scientific writing, oral communication, and ethics. In this course, “Becoming a Scientist”, undergraduate Biology majors who are conducting independent laboratory-based research projects will perform project-based learning through reading scientific papers, and through writing and oral communication of scientific results, while also gaining exposure to issues in scientific ethics and career paths. Each student will develop these skills using their honors thesis research project as a springboard. The course is divided into 5 modules: 1. Inspiring science and scientists, 2. Choosing your scientific problem, 3. Defining your scientific strategy (grant writing), 4. Honing your scientific communication skills, 5. Scientific ethics and career paths. The course is a mix of lecture, reading, writing, presentation and workshops.

Pre-requisite:

Independent Study (BIOL-UA 998).

Textbook and Required Materials:

SoG: “Speaking of Genetics”: A collection of interviews, by Jane Gitschier, Cold Spring Harbor Press. (2010) ISBN 978-1-936113-03-3 (Out of print, supplied as PDF)

AoS: “The Art of Being a Scientist”, by Roel Snieder and Ken Larner, Cambridge University Press (2009), ISBN 978-0-521-74352-5

Grading:

4 Presentations:	40%
4 Writing Assignments	30%
3 in class critiques/responses	20%
Class participation	10%

Topics:

Module 1.

Inspiring Science and Scientists

Module 2.

Identifying Your Scientific Inspiration and Question.

Module 3.

Defining your Scientific Strategy: Specific Aims

Module 4:

Communicating Your Science in Presentations

Module 5.

Scientific Ethics and Career Paths