

Story-telling to change the world

There are some oddities in the perspective with which we see the world. The fact that we live at the bottom of a deep gravity well, on the surface of a gas covered planet going around a nuclear fireball 90 million miles away and think this to be normal is obviously some indication of how skewed our perspective tends to be, but we have done various things over intellectual history to slowly correct some of our misapprehensions.

Douglas Adams (Cambridge, UK, 1998)

<http://www.biota.org/people/douglasadams>

Instructor	Juan Angueyra (jangueyra@bard.edu)
Moodle2	Citizen Science - Angueyra (W17) (short name: CS JA W17) Enrollment key: beesW17
Repository	https://github.com/CitSci2017/
Website	CitSci2017.github.io
Grading	Satisfactory / Unsatisfactory

I. Rationale:

The main goal of Citizen Science is to promote citizenry in all students. To achieve this, students will be exposed firsthand to the scientific method and scientific practices in diverse contexts (e.g. infectious disease, neuroscience, genetics, big data, etc.), so that students can understand both the strengths and uses of scientific inquiry and its limitations and pitfalls. Special emphasis will be given to the interface of science with other fields.

II. Course Aim and Outcomes:

Citizen Science is aimed to increase scientific literacy, so that students are able to critically analyze scientific claims that influence personal, national and/or global issues.

Over citizen science you are expected to learn how to:

- 1) Read a scientific paper critically, including identifying key points, interpreting data, and understanding limitations and biases
- 2) Perform a literature search to corroborate scientific claims
- 3) Make an experimental design, perform experiments, collect and analyze data
- 4) Present scientific results in a clear, concise and compelling manner
- 5) Identify biases in scientific studies and presentations

III. Format and Procedures:

The core of Citizen Science is respectful participation, thoughtful discussion and critical thinking. For this reason, attendance is required, classes start on time and absences will be taken seriously. To minimize distractions, please silence all cellphones and refrain from texting during class. The use of laptops and computers for some class-related activities will be encouraged. If you own a laptop please bring it to class. Course materials will be available at moodle2.bard.edu

Assignments:

At the end of every day, you will be assigned homework that may include readings, work group, essays and analysis, etc. Assignments have to be turned in by the start of the next session through Moodle2.

A significant part of the curriculum will be devoted to a novel research proposal, including design, grant writing and evaluation, execution, analysis and presentation. Most of the activities will be done in class, but some may require you to meet and work in groups after class.

Grading Procedures:

Students will earn a Satisfactory grade based on their attendance, participation and completion of assignments and projects. Absence in two sessions is enough to earn an Unsatisfactory grade, and being late to two sessions will count as an absence. Grading policies can be found at: <http://citizenscience.bard.edu/overview/>.

Organization:

This course is organized into three general modules: open laboratories, microbiology laboratories and computer laboratories. You will be expected to abide by general and specific safety regulations for all laboratories.

The best way to contact me outside of class is by email. I will try to respond promptly to emails received before 10:00 pm or after 8:30 am. I am happy to meet with students outside of class time to discuss questions or concerns. Please see me after class or contact me by email to set up an appointment.

IV. Course Requirements:

Citizen Science has no prerequisites, it only requires you to be engaged. All relevant readings or instructions (or instructions on how to get them) will be provided.

Do bring pens and paper to class. Some activities will require you to write and take notes during class.

V. Academic Integrity

Citizen Science adheres to Bard's policies on academic dishonesty and plagiarism, which can be found in the student handbook, and online at: <http://www.bard.edu/undergraduate/requirements/>.

All students are bound by these policies, and are expected to always act in an ethical and honest manner with regard to their academic work. The work done in Citizen Science should be your own. Any ideas or work that you use which are not your own should be clearly attributed to the source. If you are unsure if you are providing appropriate or sufficient citation, you should contact the professor before submitting the final draft of the assignment.

VI. Accommodations for students with disabilities

Citizen Science adheres to Bard's policies on equal access as stated in the student's handbook: <http://www.bard.edu/dosa/handbook/>.

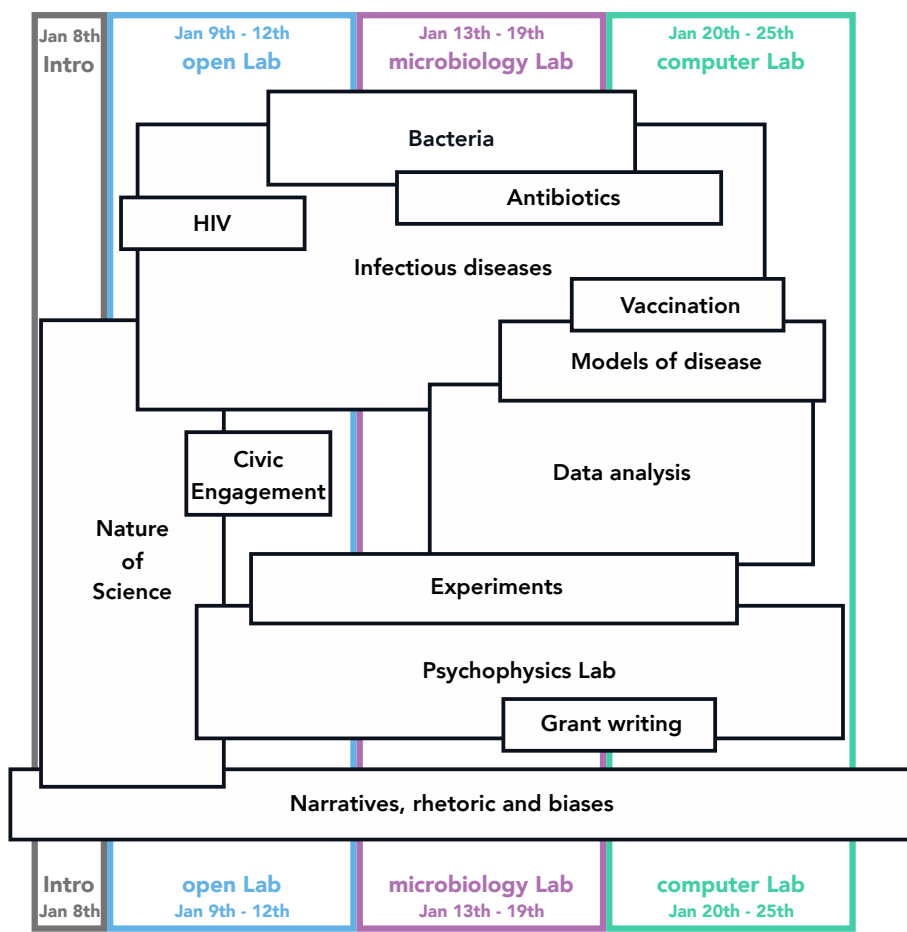
VII. Inclusivity Statement

We understand that all members represent a rich variety of backgrounds and perspectives, and we are committed to provide an inclusive environment that fosters respect. While working together, we ask community members to:

- share their unique experiences, values and beliefs
- be open to the views of others
- honor the uniqueness of their colleagues
- appreciate the opportunity that we have to learn from each other in this community
- value each other's opinions and communicate in a respectful manner
- keep confidential discussions that the community has of a personal (or professional) nature
- use this opportunity together to discuss ways in which we can create an inclusive environment

Bard College is also committed to fostering a safe, productive learning environment. Title IX and our school policy prohibit discrimination on the basis of sex regarding gender-misconduct — including harassment, domestic and dating violence, sexual assault, and stalking. We understand that sexual violence can undermine students' academic success and we encourage students who have experienced some form of sexual misconduct to talk to someone about their experience, so they can get the support they need. A complete list of confidential and non-confidential resources can be found at www.bard.edu/titleix. Alleged violations can be non-confidentially reported to the Office for Gender Equity at TitleIX@bard.edu or 845-758-7542.

VII. Course Schedule:



The course schedule is plastic and likely to change unexpectedly and without warning. For this reason, the instructor serves the right to make changes as necessary to this syllabus. Changes will be announced in class and through Moodle. Students will be held responsible for all changes. For the most up-to-date version visit CitSci2017.github.io