**Citizen Science Winter 2012**

Syllabus, Savage section

Instructor: Amy F. Savage, PhD

Email: [asavage@bard.edu](mailto:asavage@bard.edu)

Course Moodle Code: vectorS12

**Important to Know:**

The best way to contact me outside of class is by email. Students should be aware that I may not promptly answer emails arriving after 10:30 PM or before 8:30 AM. Please plan on emailing me before 10:30 PM if it is possible. 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.

**Learning Objective**

The objective for this section of Citizen Science is for all students to better understand the nature of scientific inquiry, and its role and relevance outside of the laboratory. By challenging themselves in this program, students will become more empowered consumers of scientific information.

**Learning Goals**

At the end of Citizen Science, students will be able to:

1. Read a scientific paper, interpret the data and identify key points
2. Be able to perform a literature search as a means to fact check scientific claims
3. Discuss the features of experimental design, including controls
4. Describe how computer modeling can be used to inform us about infectious diseases and their control
5. Keep a lab notebook and describe the importance of recordkeeping

**Expectations**

As you know, you will not receive a traditional letter grade (A-F) for your work in this class. Rather, you will be marked as having either “Satisfactory” or “Unsatisfactory” performance. This will be a part of your permanent transcript.

Students earning “Satisfactory” performance will have done the following:

1. Attend each class session, arriving on time. Attendance is mandatory.
2. Come prepared, with homework assignments completed
3. Contribute to the exchange of ideas in class and on moodle, as appropriate

**Feedback**

At the end of each of the 4 sections, I will give each of you some feedback based on your nightly log, homework, lab book and participation. There will also be an opportunity for you to provide feedback as well.

**Homework**

1. *Nightly Log:*

Broadly review what the major topics were that we covered that day. Describe one thing that you learned that you did not know previously, and describe one point that was still unclear. These will be turned in to me near the end of each module for evaluation. (1-2 pages)

1. *Lab Notebook:*

During Wet Lab each day, take notes about the experiments you are doing. Write down what you did, in order (i.e. I added 10 microliters of X to 90 microliters water to make a 1:10 dilution). In the evening you will write it in your blue book under the heading “Lab Book Entry.” See online instructions on the course website how to keep a lab book, and follow that format. (1-3 pages)

During Computer Lab each day, keep track of how the results of your experiments changed with each outcome. Each evening, summarize the computer models that we did, briefly noting how changing the parameters of the program influenced the outcome. Describe what this model can add to our understanding of disease under the heading “Computer Lab Summary.” (1-2 pages)

These will be turned in to me near the end of each module for evaluation.

1. *Readings*, *Group Work*, *Problems, etc* as assigned in class

**Computer & Cell Phone Policy**

In our classroom, we will rely on each student being engaged in the conversation. To minimize distractions, please silence all **telephones** at the start of class and leave them in your bag. **Computers** will only be used for specific activities. Please plan on taking any notes on paper. If you have a laptop which you would like to bring, you may be asked to do on-the-spot research in class. After the end of the in class activity, you will be asked to close the computer once again.

**General Laboratory Preparedness**

We will be starting in the laboratory first thing in the morning on the first day. As you prepare for class please remember the following:

* NO open toed shoes, sandals or flip-flops, NO bare feet
* NO eating or drinking in the lab at all. This includes coffee, granola bars, etc
* NO loose clothing
* Long hair should be tied back
* If you wear contacts lenses, you may might plan on wearing your glasses instead
* Book bags must be left in the hallway