**Math, Genes, and You**

Week 1, Day 1: Introduction and Class Rules

**Plan for today:**

Introductions

Class rules

Class activity: Inventory of traits

Class discussion: You discovered a new gene. What does it do?

**Contact information:**

Class page: <https://www.openlearning.com/beam/courses/bdut-am-greg/homepage/>

Class Zoom: <https://zoom.us/j/92333924973>

Class Time: **Section 1** Mon Thu 1:15pm – 2:10pm, **Section 2** Tue Fri 1:15pm – 2:10pm

Open Math Time: Mon Tue Thu Fri 2:20pm – 2:50pm, Wed 10:40am – 11:10am

Teacher: Greg Zajac, PhD [gzajac@umich.edu](mailto:gzajac@umich.edu)

TA: Johnathan Lugo, [lugo\_johnathan@wheatoncollege.edu](mailto:lugo_johnathan@wheatoncollege.edu)

TA: Yared Tadesse, [yt492@cornell.edu](mailto:yt492@cornell.edu)

TA: Fatima Yuen, [fatimayuen1@gmail.com](mailto:fatimayuen1@gmail.com)

**Course goals:**

Connect mathematical concepts to the real world

Introduce students to how math is used in science

Have fun with math!

**Class rules:**

*Help us make good rules together!*

**Course Materials**

A handout will be posted before each class. Problem sets on the handout are due before the next class. Download this and submit problem sets on the [Learning Activities](https://www.openlearning.com/beam/courses/bdut-am-greg/coursefeed/?moduleSet=Default) page.

**Helpful links:**

<https://www.23andme.com/gen101/>

<https://www.khanacademy.org/science/biology>

<https://learn.genetics.utah.edu/content/basics/>

**Genetics News:**

If you find an article you like about genetics, post a link to the [Course Feed](https://www.openlearning.com/beam/courses/bdut-am-greg/coursefeed) and give a 5 minute summary at the beginning of class. Here are some recommended sources:

Genome Web <https://www.genomeweb.com/>

GEN <https://www.genengnews.com/>

Nature News <https://www.nature.com/news>

Science Daily <https://www.sciencedaily.com/>

Science News <https://www.sciencemag.org/news>

**Inventory of Traits:**

Total number (students + Greg + TAs) in the class today: \_\_\_

|  |  |  |
| --- | --- | --- |
| **Trait** | **Number** | **Percentage** |
| Has detached earlobes |  |  |
| Can roll tongue |  |  |
| Has dimples |  |  |
| Is right-handed |  |  |
| Has freckles |  |  |
| Has naturally curly hair |  |  |
| Has cleft chin |  |  |
| Has allergies |  |  |
| Left thumb crosses over right when hands clasped |  |  |
| Is not color blind |  |  |
| Hairline on forehead is straight |  |  |
| Can wiggle ears |  |  |

Src: <https://teach.genetics.utah.edu/content/heredity/files/InventoryOfTraits.pdf>

**Problems:**

Test submission to Open Learning

Options:

1. Write your name on a piece of paper, photograph it, and upload to Open Learning
2. Write your name on your tablet, save it, and upload to Open Learning
3. Type your name on a document, save it, and upload to Open Learning