# **Student Information Card**

Please write your responses on an index card and bring to front.

- 1. Name on Mt. SAC records:
- 2. Preferred name, if different from above:
- **3. Preferred pronunciation of name:**
- 4. Preferred gender:
- 5. Is there anything else you would like me to know about you? For instance, is there anything else that you can tell me so that I'll better understand how you learn?

## Welcome to Microbiology 22

**Prof. Chris Briggs** 

cbriggs5@mtsac.edu

faculty.mtsac.edu/cbriggs

Task #1: Please find something you have in common with someone sitting near you – something not obvious.

# Introduction to Microbiology

**Microorganisms?** 

Dr. Bassler, TED talk: <u>https://www.ted.com/talks/bonnie\_bassler\_o</u> <u>n\_how\_bacteria\_communicate?language=en</u>

# Introduction to Microbiology

Scale of the Universe: http://faculty.mtsac.edu/cbriggs/ http://htwins.net/scale2/

# Introduction to Microbiology

**Major topics:** 

- History, scientific themes
- Anatomy
- Metabolism
- Genetics
- Diversity
- Diseases

# Why care?

- 1. Jot down some of your favorite ideas or questions.
- 2. Share one or two of your ideas with a partner.
- 3. Work together to connect that idea to microbiology.

**Example: Cancer treatment** 

Connection: Can microorganisms cause cancer? Can they be used to treat it?

Example: Shoe design

Connection: Which microorganisms cause foot odor?

## **Textbook editions**

### 10th







12th



## Discussion

For your investigator, did their life fit these themes?

Why do you say so?





### (a) Van Leeuwenhoek using his microscope

history-of-the-microscope.org

### **Edward Jenner**



#### med.umich.edu



### Horn from "Blossom," the cow http://quigleyscabinet.blogspot.com/

#### Chinese work on variolation

http://amhistory.si.edu/



# Balmis Expeditions (1803-1806)



#### en.wikipedia.org



Francesco Redi



John Needham



Lazzaro Spallanzani

"Here the searcher in him came forward – he didn't go to his desk to write Needham about it – instead he went to his dusty glass-strewn laboratory, and grabbed some flasks and seeds, and dusted off his microscope. He started out to test, even to defeat, if necessary, his own explanations." (de Kruif, 1937)



en.wikipedia.org

## **Emerging Infectious Disease**





www.umt.edu



<u>sites.jmu.edu</u>



scholarblogs.emory.edu



news.vanderbilt.edu





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