

- **Phonology:**  
**Mental grammar of sounds**
- **Segmental phonology:**  
**Phonemes and allophones**

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*Background:*

- *HW #1, question (3)*
- *Phonetics terms and concepts*

## 0. Today's plan

- Checking in and setting the stage
- Follow-up discussion:  
How the nasal spelled <ŋ> is pronounced
- Basic concepts in **segmental phonology** —  
**phoneme, allophone**
- Writing a **phonological rule**

## 0. Course information

- Checking in on course infrastructure and technology
  - Be sure to see Sakai “Announcement” about **accessing Zoom videos** with Panopto
  - My **office hours** are now **Tu 2-3**  
(and, as always, by appointment)
  - Any other questions or problems about accessing course resources?

# 1. Review and context

- What ideas from the course so far stand out to you?
  - Contribute anonymous comments on the Anonymous Check-in padlet  
(See link on today's "Daily syllabus" page)

# 1. Review and context

- Are there course topics you feel you have unanswered questions about?
  - Contribute anonymous comments on the Anonymous Check-in padlet  
(See link on today's "Daily syllabus" page)

# 1. Review and context

So far in this course:

- **Phonetics**

- How to use **IPA symbols** to “write down” speech sounds, without relying on an individual language’s spelling system
- Terms to **describe vowels and consonants** — Where and how is the sound made?
  - Lots of new terms to know
  - But usually you can “check”, physically

# 1. Review and context

Our topic for the next few classes:

- **Phonology** → Sounds in the mental grammar  
Those phonetics terms actually explain a lot about how sounds form patterns, cognitively
  - First we will look at **segmental phonology** (vowels and consonants)
  - Then we will look at **prosodic phonology** (syllables, pitch accent)

# 1. The pronunciation of <h> in context

- What generalizations were you able to make about the pronunciation of the sound spelled <h>?



# 1. The pronunciation of <ん> in context

- What generalizations were you able to make about the pronunciation of the sound spelled <ん>?
- Note: The description of <ん> in the Genki textbook is actually a little too simplistic

For more accurate information, see:

- Data set - ["Syllable-final nasals"](#)
- [Sound files on Sakai](#)

## 2. Phonology: Sounds in mental grammar

- What generalizations were you able to make about the pronunciation of the sound spelled <h>?
- Big idea here: Some of the phonetic properties of sounds are also used by the **mental grammar**
  - to classify sounds into groups
  - to change one sound into another in some context
- Handout - "Phonemes, allophones, and complementary distribution"

### 3. Voiced and voiceless vowels

- Data set - “Voiceless vowels”

Applying these phonology concepts:

- Examining the environments for patterns
- Determining whether two sounds have...
  - Predictable environments → Allophones of same phoneme
  - Unpredictable environments → Distinct phonemes
- Writing a phonological rule to account for the allophones of a phoneme

## 4. Bilabial, palatal, and glottal fricatives

### Work groups:

- **Data set** - “Bilabial, palatal, and glottal fricatives”,  
*Part I only for now*
  - Open this data set on your own device  
(also linked from Daily syllabus page on course web site)
- **Goals:**
  - Characterize the **environments** of the fricatives
  - What **phonological rules** can we write?

## 4. Bilabial, palatal, and glottal fricatives

- **Debriefing**

- How can we characterize the environment of each of these fricatives?
- Is their distribution predictable, or unpredictable?
- What does this tell us about **phonemes**, **allophones**, and **phonological rules**?