#### LING/ANTH 520

# Linguistic Phonetics

- Review: Calculating f<sub>0</sub>
- Introduction to Lab #02

#### Background reading:

- V&C Ch 2, sec 2.1, "Tones"
- V&C Ch 2, sec 2.2, "English intonation"

# 0. Today's objectives

Today's focus is work time on Lab #02

After this lab intro discussion, you should be able to:

- Calculate the  $f_0$  of a complex periodic wave from a waveform display
- Name some ways that  $f_0$  is used by languages

#### 0. Mindset

- Prep questions are designed to help you master the material
- When you are working on prep questions, use the opportunity to
  - Reflect on **past course material** to see what connections you can make / what you can apply
  - Review any assigned readings or activities and see what new information might be relevant

## 1. Calculating $f_0$ from a waveform

- What does the abbreviation  $f_0$  stand for?
  - What does this term mean?

## 1. Calculating $f_0$ from a waveform

• What is the  $f_0$  of this sound wave?



# 2. How languages use $f_0$

- What is a tone language?
  - What are some examples you know of?
  - Is American or British English a tone language?
- WALS map: <u>Tone</u>
  - "Simple" tone system = high vs. low
  - "Complex" tone system = more contrasts (additional levels, contour tones, or both)
- Potential final project topic area?
  (What is a good research question?)

# 2. How languages use $f_0$

• How does English use  $f_0$ ?

### Try uttering You ate my lasagna

- ... as a simple statement of fact
- ... as a confirmation question
- ... as a question asked with strong disbelief
- ... as a threatening accusation

# 2. How languages use $f_0$

- Intonation and prosodic structure more generally (phrases, pauses) are influenced by morphology and syntax as well as phonology
  - Potential final project topic area for people interested in these interfaces

### 3. Lab #02

Any questions or technical problems?