

# SPAU 133- Lecture 2

Phonetics

# What is phonetics?

- It is the study of the minimal units of language which are the sounds of speech.

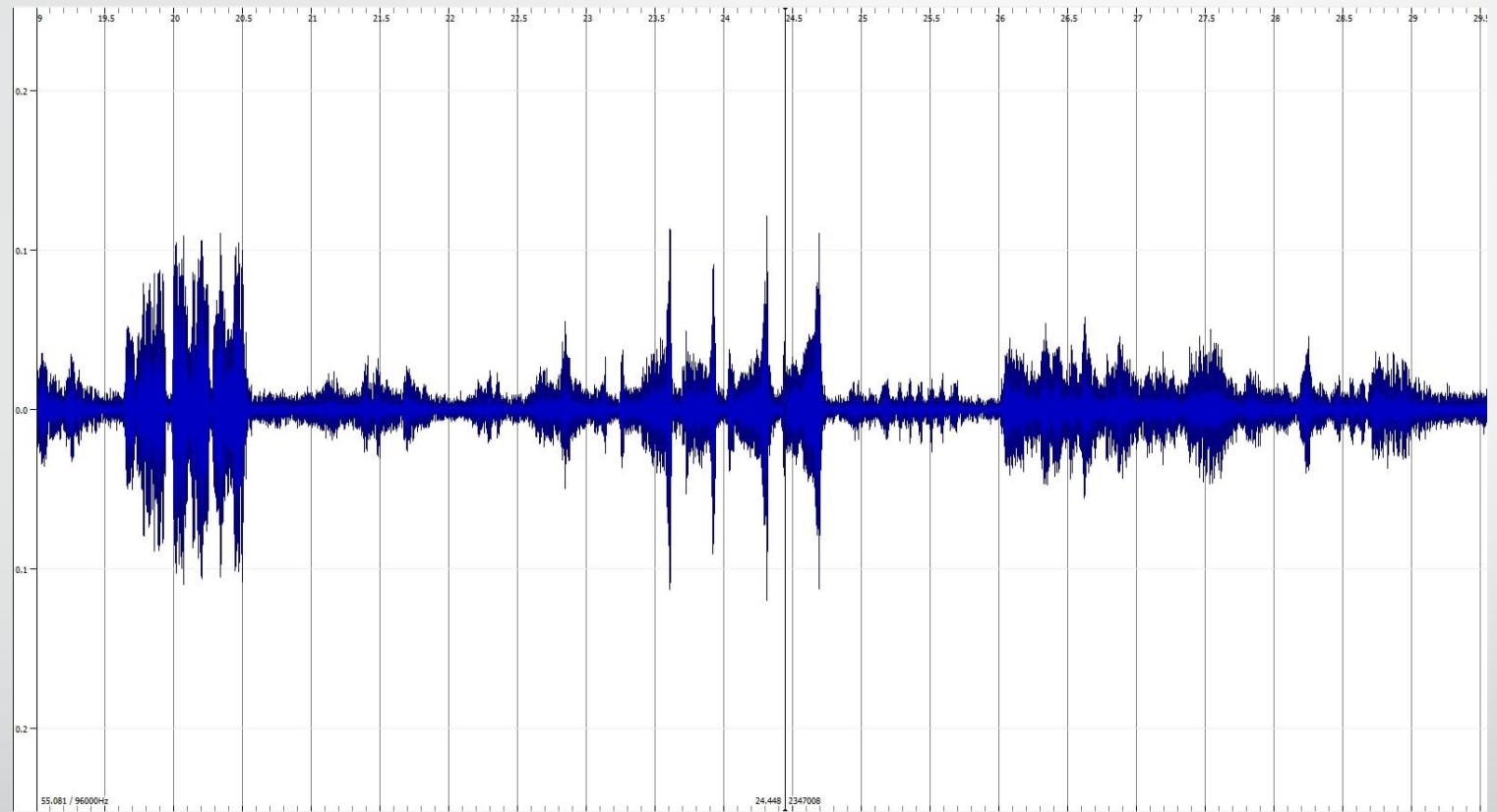
# There are three aspects of studying phonetics:

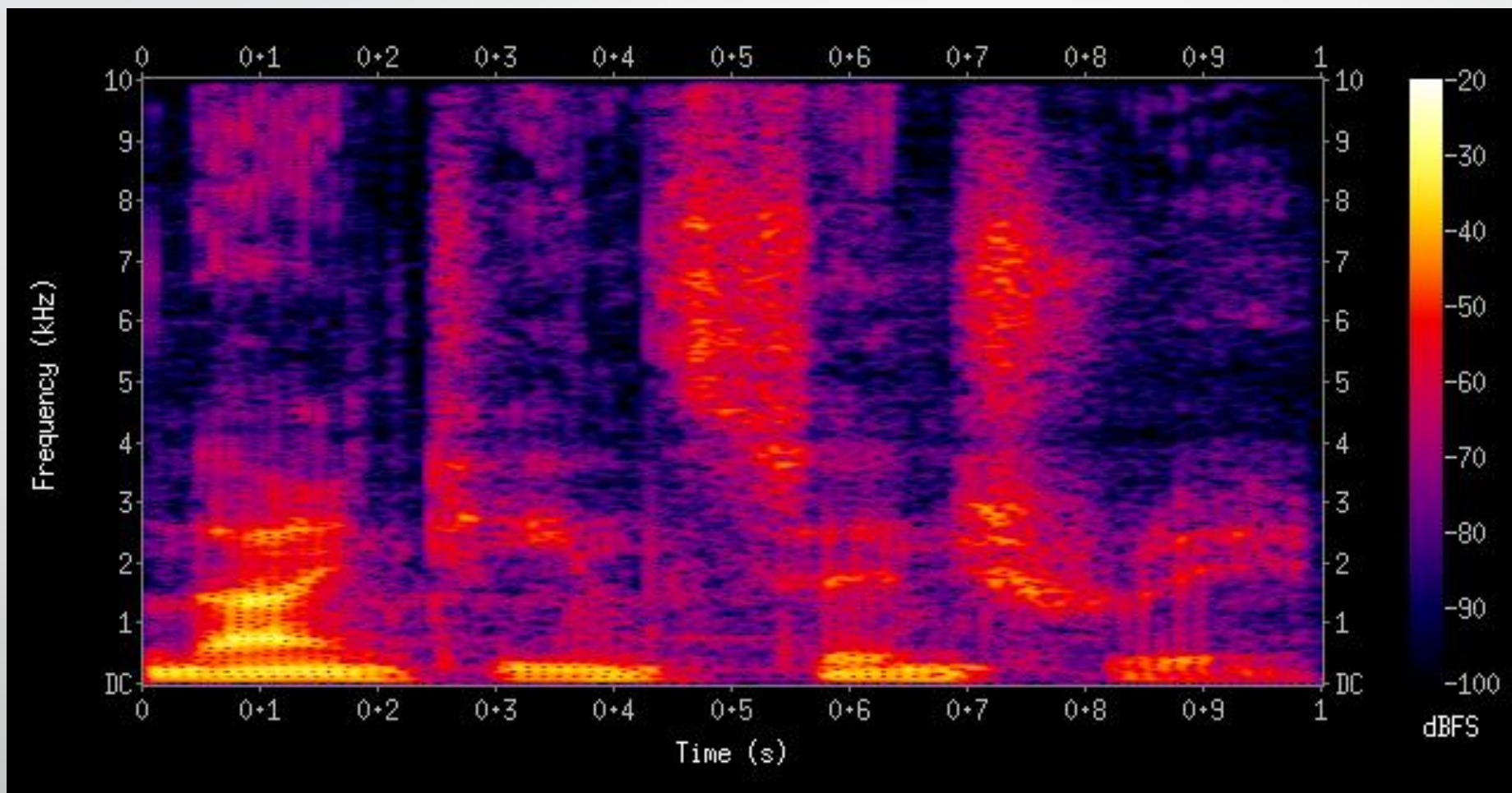
1. Articulatory phonetics: the study of the production of speech sounds.
2. Acoustic phonetics: the study of the transmission and the physical properties of speech sounds.
3. Auditory phonetics: the study of the perception of speech sounds.

# Things we use to study phonetics




















# IPA System

## International Phonetic alphabet

- Impressionistic phonetic transcription is a way of writing down speech sounds so we can capture what is said and how it is pronounced.

Speech Sounds

```
graph TD; A[Speech Sounds] --> B[Segments]; A --> C[Suprasegmentals]; B --> D[Vowels]; B --> E[Consonants]; C --> F[Pitch]; C --> G[Stress]; C --> H[Intonation];
```

Segments

Vowels

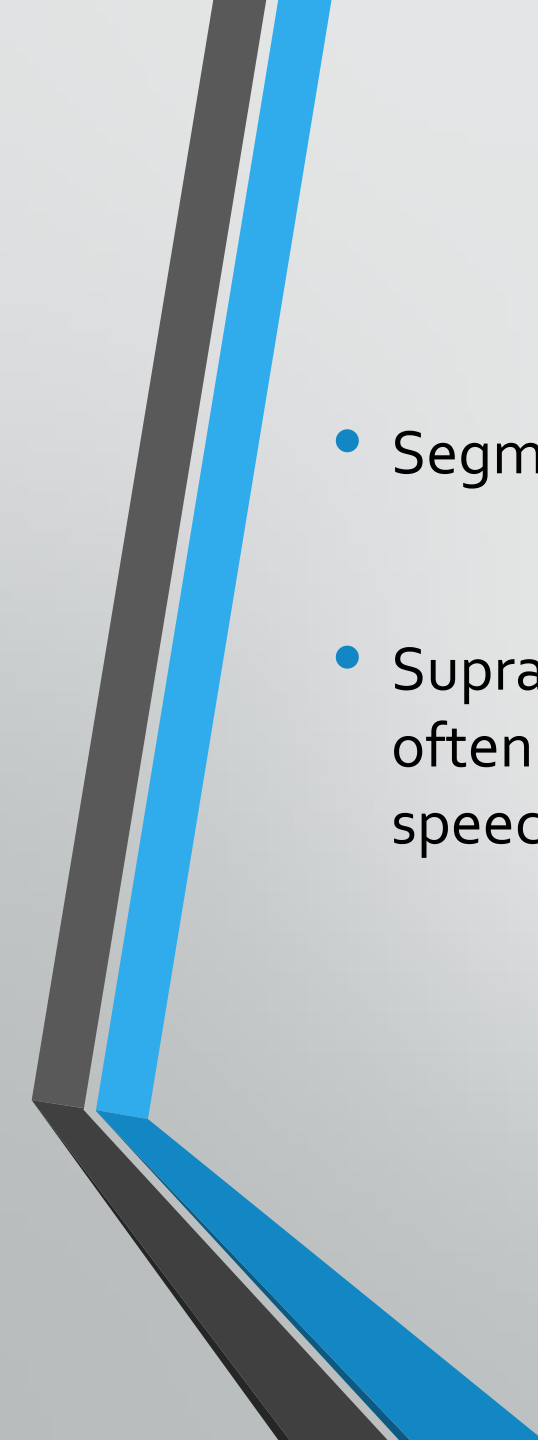
Consonants

Suprasegmentals

Pitch

Stress

Intonation

- 
- Segments: discrete units of speech stream
  - Suprasegmentals: properties that “ride on top of” speech sounds. They often apply to a string of speech sounds, but can also apply to individual speech sounds.

# What is the difference between Vowels and Consonants?

- The production of consonants involves a constriction of the airflow somewhere in the vocal tract.
- The production of vowels does not involve any restrictions that hinder the airflow. Sometimes a slight narrowing in the vocal tract can occur but the airflow will still flow freely.
- Vowels and consonants are also different in terms of their roles in a syllable.