Sounds of the World's Languages: Phonetics 1 LING 100, Winter 2025

Teaching Team Information

Jonathan Paramore (Instructor)

Email: jcparamo@ucsc.edu

Office: Stevenson Academic Building, Rm. 257 (Linguistics Dept.) Office hours: Wednesdays, 2:45 - 3:45pm or by appointment

Hanyoung Byun (Teaching Assistant)

Email: hbyun5@ucsc.edu

Office hours: Stev. Rm. 265, Mondays, 11:00am-12:00pm (TA office)

Ian Carpick (Teaching Assistant)

Email: icarpick@ucsc.edu

Office hours: Stev. Rm. 265, Fridays, 11:00am-12:00pm (TA office)

Ben Sommer (LSS Tutor)

Small Group Tutoring is open to all students. Tutoring will give you extra practice on topics you are struggling with, and it will improve your performance. Your tutor is an undergraduate student who took the class, did well, and received training on how to support you. Sessions are available several days a week and attendance is voluntary.

Tutoring Sessions:

Sun: 12:00-1:00pm Acad. Resource Center 202

Tues: 9:50-10:50am STEM Hub 2 Franklin, in S&E Library
Tues: 3:20-4:20pm STEM Hub 2 Franklin, in S&E Library 214

Time and Place

Lectures: MWF, 4:00 - 5:05pm, Stevenson 175

Sections:

A: Mondays 8:00-9:05am Cowell Acad. 216 Byun B: Mondays 9:20-10:25am Cowell Acad. 216 Byun \mathbf{C} : Wednesdays 10:40-11:45am Oakes Acad. 101 Carpick D: Fridays 9:20-10:25am Cowell Acad. 216 Carpick

Winter classes: Mon, Jan 6 - Fri, Mar 14

Final Paper: due Thu, Mar 20 @ 3:00pm (no late papers accepted!!!)

Course Description and Learning Outcomes

This course provides a comprehensive introduction to the sounds of human language. This quarter you will be treated to an elaborate tour of the vocal tract, learning its parts and what they do, and you will learn a system of phonetic transcription produced by the International Phonetic Association (IPA). At the end of the course, you will be able to describe any sound produced by human languages in terms of the physiology of the vocal tract; to correctly perceive, and produce the sounds (often, anyway); and to transcribe them so that any other IPA-trained person could also pronounce them. Towards the end of the course, you will also learn some basics of phonology, particularly how to do phonemic analysis of any language. Topics include:

- Anatomy of the vocal tract
- Articulatory phonetics
- Hearing and transcribing speech sounds
- Inventory of sounds used in human language
- Determining an inventory of sounds for a language

This course contributes to three program learning outcomes of the linguistics and language studies majors:

1. Analytical thinking

Students will formulate testable hypotheses, and present them clearly and completely. Students will accurately and insightfully use relevant evidence to evaluate hypotheses and determine routes for future investigation.

2. Writing

Students will formulate well-organized written arguments. At the microlevel, sentences will be grammatical, follow appropriate conventions, and strike an appropriate balance of clarity and complexity. At the macro-level, sentences will be linked together into paragraphs, and paragraphs into logical sections of a larger document.

3. Properties of language

Students will apply analytical techniques to identify general properties of language, including but not limited to sound structure, word structure, sentence structure, meaning, use, and language processing. Students will explain the significance of relevant universal properties in some domain.

The following learning outcomes are particular to this course:

4. Articulatory description and understanding

Students will be able to describe any sound using phonetic terminology and understand how it is produced in the vocal tract.

5. Practical phonetic competence

Students will learn how to perceive and produce a wide range of sounds from the world's languages.

6. IPA transcription

Students will learn how to transcribe words and sounds using the alphabet of the International Phonetic Association, and how to read sounds transcribed in IPA.

7. Phonemic analysis

Students will learn how to analyze sound patterns in particular languages, discern what sounds are contrastive (phonemic), and infer how variants (allophones) of phonemes are distributed.

Requirements

Readings: There is no textbook for this course. Instead there will be weekly readings available on our Canvas website. You should *complete the reading before the start of class by the date listed* on the schedule below. Comprehension quizzes based on readings will occassionally be given during lectures and sections.

Transcription Quizzes: There will be 9 transcription quizzes which will be administered in lectures and sections. These are spot-checks on your transcription skills.

Homework: These will be due roughly every other week and will involve bigger-picture reasoning about the topics in the class. You may work on these in groups or consult with your classmates (and are encouraged to do so!), but the write-ups must be done individually and submitted via Canvas. Use of AI will result in an automatic zero for the assignment when detected.

Experiment Participation: You must participate in one experiment during the course of the quarter to get an understanding of how linguistic research is conducted. All experiments are less than an hour, most will be conducted remotely. You can sign up for an account and for the experiments here. The slots fill up fast towards the end of the quarter, so please schedule in advance! If you do not feel comfortable participating in an experiment, please see the instructor for an alternative that is equal in time/effort commitment.

Final Paper: You will be given an audio file with a list of words from an unrevealed language. Your task will be to (1) transcribe these words in detail, (2) develop a complete sound inventory of the language (consonants, vowels, tone, nasality, etc.), justified with minimal pairs from the recording, and (3) hypothesize which language family the language is likely a part of based on the nature of its sound system. The final paper must be submitted by the end of the final exam period designated for the class: Thu, Mar 20 @ 3:00pm. Grading will commence soon after the deadline, and papers not turned in by the completion of grading will not be accepted, unless prior email-written approval is given by the instructor.

Grading Policy: The two lowest quiz grades will be dropped. Neither reading nor transcription quizzes can be made up without prior email-written approval from the instructor before the quiz takes place, so go to class and sections! Homework should be turned in by 11:59pm on the due date given. Assignments will be graded within roughly 48 hours of this due date, and any assignments turned in after grading has taken place will not be accepted, unless prior email-written approval is given. Late final papers will not be accepted, unless prior email-written approval is given.

Final Grade Breakdown:

Requirement	% of final grade
Reading Comprehension Quizzes (9 x 2% ea.)	18%
Transcription Quizzes (9 x 2% ea.)	18%
Homeworks (5 x 6% ea.)	30%
Final Paper	30%
Experiment Participation	4%

Academic Honesty

UCSC does not tolerate plagiarism. For details, see:

- What is plagiarism?
- Guide to citing sources

Student Resources

Slug Support: For psychological or financial support, visit Slug Support.

Students with Disabilities: Contact the Disability Resource Center (DRC) for assistance by phone at 831-459-2089 or by email at drc@ucsc.edu. If you are student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me privately during my office hours or by appointment, preferably within the first two weeks of the quarter. At this time, I would also like us to discuss ways we can ensure your full participation in the course.

Title IX: Confidential support for sexual harassment or violence is available at the CARE Office: (831) 502-2273. More information about Title IX provisions can be found here.

Course Schedule (Subject to Frequent Updates)

Week 1: Overview of sound types and the vocal tract (no sections)

Mon 01/06: Overview of Phonetics

Wed 01/08: Speech Articulators Rd: GWD ch.1 (10 pgs) Fri 01/10: Manners of articulation Rd: R&J ch.2 (14 pgs)

Week 2: English speech sounds: consonants and vowels

Mon 01/13: Consonants Rd: L&J ch.3 (22 pgs)

Wed 01/15: Consonants/vowels HW1 DUE

Fri 01/17: Vowels continued Rd: L&J ch.4 (18 pgs)

Week 3: English speech sounds II: suprasegmentals (no sections)

Mon 01/20: No class (MLK Jr. Day)

Wed 01/22: Stress and the syllable Rd: L&J ch.5 (22 pgs)

Fri 01/24: Focus and intonation

Week 4: Airstream mechanisms

Mon 01/27: Pressure, airflow, the vocal tract Rd: L&J ch.6 (22 pgs)

Wed 01/29: Airstream Mechanisms HW2 DUE

Fri 01/31: Phonation and Sound Waves

Week 5: Speech sounds of the world: VOT and segments

Mon 02/03: Voice Onset Time

Wed 02/05: World consonants Rd: Zs ch.3 (18 pgs)

Fri 02/07: No Class

Week 6: Speech sounds of the world II: segments

Mon 02/10: World consonants

Wed 02/12: World consonants HW3 DUE.

Fri 02/14: World consonants Rd: Zs ch.4 (16 pgs)

Week 7: Speech sounds of the world III: nasality, stress (no sections)

Mon 02/17: No class (Presidents' Day)

Wed 02/19: World Consonants and Vowels

Fri 02/21: Vowels, Vowel length, nasality Rd: WALS ch.10 (4 pgs)

Week 8: Speech sounds of the world IV: Stress & Tone

Mon 02/24: Stress & Tone; Rd: ELing3.11 (3 pgs), Heinz23 (sect. 1-3, 6), Yip p.1-10

Wed 02/26: Zoom Office Hours HW4 DUE

Fri 02/28: Tone, stress, pitch accent Rd: Yip p.17-38 (22pgs)

Week 9: Phonetics, Phonology & Linguistic Diversity

Mon 03/03: Phonemes and allophones Rd: Zs ch.10 (16 pgs)

Wed 03/05: Ultrasound & Language Families Fri 03/07: Phonetically-grounded phonology

Week 10: Documenting a language's sound inventory

Mon 03/10: Purpose and ethics of fieldwork Rd: C&D ch.2 (18 pgs)

Wed 03/12: Language Acquisition HW5 DUE

Fri 03/14: TBD

References

Anderson, Catherine, Bjorkman, Bronwyn, Denis, Derek, Doner, Julianne, Grant, Margaret, Sanders, Nathan, & Taniguchi, Ai. (2022). Essentials of linguistics. ecampusOntario.

Chelliah, Shobhana L. & Reuse, Willem J. (2011). Handbook of descriptive linguistic fieldwork. Springer.

Dryer, Matthew S. & Haspelmath, Martin. (2013). WALS online. Retrieved December 17, 2024, from https://wals.info

Gick, Bryan, Wilson, Ian, & Derrick, Donald. (2013). Articulatory phonetics. Wiley-Blackwell.

Heinz, Jeffrey. (2023). Introduction to stress [Course handout].

Ladefoged, Peter, & Johnson, Keith. (2014). A course in phonetics. Cengage Learning.

Reetz, Henning, & Jongman, Allard. (2008). Phonetics: Transcription, production, acoustics, and perception. Wiley-Blackwell.

Yip, Moira. (2002). Tone. Cambridge: Cambridge University Press.

Zsiga, Elizabeth C. (2013). The sounds of language: An introduction to phonetics and phonology. Wiley-Blackwell.

 $^{^1\}mathrm{GWD}=\mathrm{Gick}$ et al. (2013); R&J = Reetz and Jongman (2008); L&J = Ladefoged and Johnson (2014); Zs = Zsiga (2013); Heinz = Heinz (2023); EssLing = Anderson et al. (2022); Yip = Yip (2002); WALS = Dryer and Haspelmath (2013); C&D = Chelliah and Reuse (2011)