LING 330: PHONETICS
Spring 2019

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Tu 11:30am – 1:20pm, AQ2104
Th 11:30pm – 12:20pm, WMC3510
Course website: http://canvas.sfu.ca Ling330
Office hours: Tu 4:30pm-5:30pm, Th 12:30pm-1:10pm, or by appointment

TOPICS
• This course follows up on Ling 220. Topics to be covered include anatomy and physiology of the
speech production apparatus, classification and transcription of speech sounds, speech acoustics,
and computerized methods for speech analysis.

TEXT

COURSE ORGANIZATION
• Classes will consist of lectures, discussions, lab sessions, presentations and hands-on projects.

EXAMS AND GRADING
• Grades will be assigned as follows:
  Exam 1 (take home) 30%
  Lab report or research participation (*RPS) 5%
  Exam 2 (take home) 30%
  Project (project report and presentation) 30%
  Attendance and participation 5%

• Final letter grades will be calculated from total percentage scores as follows:
  A+ 100-96  B+ 85-81  C+ 70-66  D 55-50
  A 95-91   B 80-76   C 65-61  F 49-0
  A- 90-86  B- 75-71  C- 60-56  FD Failed for academic dishonesty

• *Research participation (RPS): You receive 5 points by submitting a lab report. Alternatively, you can also earn 5 points by
participating in sanctioned research projects within the department of Linguistics. You may receive 5 points by participating in
a single experiment that lasts more than one hour or requests two visits, or by participating in two short experiments. Please
note that you need to complete the participation of such experiments two weeks prior to the last day of class. You can find a
list of available sanctioned projects as well as an explanation of the procedures at:
https://www.sfu.ca/policies/gazette/student/s10-01.html

REQUIREMENTS & POLICIES
• Please review the Linguistics Department’s “Department Standards”
  https://www.sfu.ca/linguistics/undergraduate/standards.html
• Plagiarism and Academic Dishonesty: Academic dishonesty is a form of misconduct that is subject to disciplinary
  action and includes the following: cheating, fabrication, fraud, facilitating academic dishonesty, and plagiarism.
  For more information, please visit: http://www.sfu.ca/policies/gazette/student/s10-01.html. If a student is found
guilty of plagiarism or other form of academic dishonesty on a class paper, an exam or an assignment, an
academic dishonesty report will be written for that student, and this report will be filed in the department. The
student gets zero for the paper, the exam or the assignment. If more than one academic dishonesty report has
been filed for a student, the case can be presented to the University Board on Student Discipline.
• Read assigned readings before class; be prepared to participate in class discussions.
• For a missed class, obtain the lecture notes, handouts, and/or assignments either from the course website (when
available) or from a classmate.
• Submit reports and take-home exams on time. Late submission will NOT be accepted.
• In-class behavior
  - Students are expected to attend all classes and arrive on time.
  - Students should NOT bring food, or use cell phones or disruptions of any kind during class hours.
  - Students should not talk while the instructor or another student is talking.
  - A student who fails to behave respectfully in class may be asked to leave.
• Students requiring accommodations as a result of a disability must contact the Center for Studies with Disabilities
  (csdo@sfu.ca).

Ling 330 Phonetics - Linguistics Dept., SFU - Wang
### TENTATIVE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/3 TR</td>
<td>Introduction</td>
<td>Ch.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1/8 TU</td>
<td>Articulatory phonetics: sound classification</td>
<td>Ch.2</td>
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<tr>
<td></td>
<td>1/10 TR</td>
<td>Articulatory phonetics: anatomy &amp; physiology</td>
<td>Ch.5,</td>
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<td>Ch.6.3</td>
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<tr>
<td>2</td>
<td>1/22 TU</td>
<td>Phonetic transcription and allophones</td>
<td>Ch.3</td>
<td>1/22 Exam 1 assigned (take-home exam)</td>
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<tr>
<td></td>
<td>1/24 TR</td>
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<tr>
<td>3</td>
<td>1/29 TU</td>
<td>Acoustic phonetics: basic acoustics</td>
<td>Ch.7</td>
<td>1/31 Exam 1 due</td>
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<tr>
<td></td>
<td>1/31 TR</td>
<td>Source-filter theory of speech production</td>
<td>Ch.9</td>
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<tr>
<td>4</td>
<td>2/5 TU</td>
<td>Acoustic characteristics of speech sounds</td>
<td>Ch.10</td>
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<td></td>
<td>2/7 TR</td>
<td>Suprasegmentals</td>
<td>Ch.11</td>
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<tr>
<td>5</td>
<td>2/12 TU</td>
<td>Lab: Speech analysis software demonstration</td>
<td>Ch.8</td>
<td>2/14 Final project assigned</td>
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<td></td>
<td>2/14 TR</td>
<td>Lab: Exercises &amp; Assignment of final project</td>
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<tr>
<td>6</td>
<td>2/19 TU</td>
<td>Reading break (no class)</td>
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<td>2/21 TR</td>
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<tr>
<td>7</td>
<td>2/26 TU</td>
<td>Lab: Exercises &amp; Assignment of Exam 2</td>
<td></td>
<td>2/26 Exam 2 assigned (take-home exam)</td>
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<td></td>
<td>2/28 TR</td>
<td>Lab: Exam 2 Q&amp;A</td>
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<tr>
<td>8</td>
<td>3/5 TU</td>
<td>Lab: Exam 2 Q&amp;A</td>
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<td></td>
<td>3/7 TR</td>
<td>Project session 1: topic</td>
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<tr>
<td>9</td>
<td>3/12 TU</td>
<td>Project session 2: group meetings</td>
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<td>3/14 Exam 2 due</td>
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<td></td>
<td>3/14 TR</td>
<td>Summary of Exam 2</td>
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<tr>
<td>10</td>
<td>3/19 TU</td>
<td>Sounds of the world’s languages</td>
<td>Ch.4</td>
<td>3/21 RPS or lab report due</td>
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<td>3/21 TR</td>
<td>Project session 3: data analysis</td>
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<tr>
<td>11</td>
<td>3/26 TU</td>
<td>Airstream mechanisms &amp; phonation types</td>
<td>Ch.6</td>
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<td>3/28 TR</td>
<td>Project session 4: preparation for presentation</td>
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<tr>
<td>12</td>
<td>4/2 TU</td>
<td>Project presentation 1 (poster option)</td>
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<td>4/4 Project report due</td>
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<td>4/4 TR</td>
<td>Project presentation 2 (oral option)</td>
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### TOOLS AND RESOURCES

- For the use of speech recording and analysis, download
  WaveSurfer: [https://sourceforge.net/projects/wavesurfer/](https://sourceforge.net/projects/wavesurfer/)
  Praat: [http://www.fon.hum.uva.nl/praat/download_mac.html](http://www.fon.hum.uva.nl/praat/download_mac.html) (Mac),

- Speech analysis tutorials:
  Wavesurfer: [http://www.speech.kth.se/wavesurfer/man.html](http://www.speech.kth.se/wavesurfer/man.html)
  Praat: [http://www.fon.hum.uva.nl/praat/](http://www.fon.hum.uva.nl/praat/)
  Praat: [http://www.fon.hum.uva.nl/praat/manual/1Intro.html](http://www.fon.hum.uva.nl/praat/manual/1Intro.html)
  Praat: [http://www.fon.hum.uva.nl/praat/manualsByOthers.html](http://www.fon.hum.uva.nl/praat/manualsByOthers.html)

- Internation Phonetic Alphabet (IPA):
  IPA audio illustrations: [https://web.uvic.ca/ling/resources/ipa/charts/IPAlab/IPAlab.htm](https://web.uvic.ca/ling/resources/ipa/charts/IPAlab/IPAlab.htm)
  IPA font: [https://www.internationalphoneticassociation.org/content/ipa-fonts](https://www.internationalphoneticassociation.org/content/ipa-fonts)