



SPCH13005 Acoustics and Phonetics

Term 1 - 2022

Profile information current as at 26/04/2024 07:52 pm

All details in this unit profile for SPCH13005 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

This unit will focus on acoustic phonetics and phonetic transcription of speech. You will apply this theoretical knowledge to practice in a speech pathology context across culturally and linguistically diverse settings. You will be introduced to basic acoustics related to speech, including the analysis of sound waves and speech samples. You will form an understanding of the relationship between the vocal tract and speech sounds produced, as well as the interface between phonetics, phonology and supra-segmentals. The assessment tasks will require you to demonstrate knowledge and skills in listening to and transcribing both normal and disordered speech using the International Phonetic Alphabet (IPA) and Australian-English vowel symbols, a fundamental skill required when assessing, diagnosing and treating people with speech disorders.

Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

There are no requisites for this unit.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 1 - 2022

- Rockhampton

Attendance Requirements

All on-campus students are expected to attend scheduled classes - in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

[Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Online Quiz(zes)**

Weighting: 50%

2. **In-class Test(s)**

Weighting: 50%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Have Your Say

Feedback

The students commented that this course was interesting and engaging.

Recommendation

It is recommended that both lecturers continue to include interactive and engaging learning experiences throughout the unit.

Feedback from Results of quizzes and in-class tests

Feedback

Students performed disproportionately on the acoustics and phonetics sections of the assessment tasks.

Recommendation

The two lecturers will discuss the performance differences between the two content areas and consider strategies to ensure more equitable results.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Phonetically transcribe Australian English connected speech using International Phonetic Association symbols and Australian vowel symbols
2. Use anatomical knowledge of the shape and formation of the vocal tract to describe and acoustically analyse speech
3. Identify and describe acoustic principles and properties related to speech.

The learning outcomes in this unit contribute to the development of clinical and professional competencies as outlined by Speech Pathology Australia's Professional standards.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes		
	1	2	3
1 - Online Quiz(zes) - 50%		•	•
2 - In-class Test(s) - 50%	•		•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes		
	1	2	3
1 - Communication	•	•	•
2 - Problem Solving	•	•	•
3 - Critical Thinking	•	•	•
4 - Information Literacy	•	•	•
5 - Team Work			
6 - Information Technology Competence	•	•	•
7 - Cross Cultural Competence			
8 - Ethical practice			
9 - Social Innovation			
10 - Aboriginal and Torres Strait Islander Cultures			

Textbooks and Resources

Textbooks

SPCH13005

Prescribed

Australian English pronunciation and transcription

Edition: 2nd ed. (2017)

Authors: Cox, F., & Fletcher, J.

Cambridge University Press

Australia

ISBN: 9781316639269

Binding: Paperback

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Praat (<https://www.fon.hum.uva.nl/praat/>)

Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Tina Janes Unit Coordinator

t.janes@cqu.edu.au

Barbra Zupan Unit Coordinator

b.zupan@cqu.edu.au

Schedule

Week 1 - 07 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
PHONETICS FACE-TO-FACE CONTENT: <ul style="list-style-type: none">• Explanation of expectations for the term• Introduction to Australian English speech production and accents• Introduction to consonants (voicing, place, manner)• Exposure to phonemic transcription RECORDED CONTENT / ACTIVITIES: <ul style="list-style-type: none">• Video clips re: Australian vowels (https://www.youtube.com/watch?v=_4_Jx-7lOeM) and consonants (https://www.youtube.com/watch?v=ysWbAjVwoP8)• H5P activities - voiced and voiceless sorting task; fill in the blanks; manner of production table• Activity - Use the IPA site to copy your details into a word document and email this to the lecturer	Cox, F. & Fletcher, J. (2017) <ul style="list-style-type: none">• Chapter 1 - Introduction to Australian English speech production• Chapter 2 (pp. 22-54) - Consonants and vowels	

Week 2 - 14 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
PHONETICS FACE-TO-FACE CONTENT: <ul style="list-style-type: none">• Review and extension of Week 1 topics• Introduction to vowels• Syllables, word stress, sentence stress and intonation (part 1) RECORDED CONTENT / ACTIVITIES: <ul style="list-style-type: none">• Lecture - syllables and suprasegmentals (part 2)• H5P tasks including syllables and suprasegmentals activities, the manner and place table and the Australian vowels video with questions built into the video	Cox, F. & Fletcher, J. (2017) <ul style="list-style-type: none">• Chapter 2 (pp.54-74)- Consonants and vowels (Vowels)• Chapter 3 - Syllables, word stress, sentence stress and intonation	

Week 3 - 21 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
PHONETICS FACE-TO-FACE CONTENT: <ul style="list-style-type: none">• Revise syllables, word stress, sentence stress and intonation• Broad transcription of Australian English RECORDED CONTENT / ACTIVITIES: <ul style="list-style-type: none">• Completion of the exercises on the Australian Linguistics website• The H5P activities for this week include the vowel chart, diphthong descriptions parts one and two, sonority profile, combinatory constraints in English words• There are three lectures to watch which will take you just under 40 minutes for all three.	Cox, F. & Fletcher, J. (2017) <ul style="list-style-type: none">• Chapter 4 - Broad transcription of Australian English	

Week 4 - 28 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
PHONETICS FACE-TO-FACE CONTENT: <ul style="list-style-type: none">• Continue broad transcription of Australian English• Evaluation of two broad transcription systems RECORDED CONTENT / ACTIVITIES: <ul style="list-style-type: none">• The H5P tasks for this week include revision of all the previous content and intrusive and linking phonemes• You will be provided with a written task which will need to be handed into the lecturer before class in Week 5	Cox, F. & Fletcher, J. (2017) <ul style="list-style-type: none">• Chapter 6 - Evaluation of two broad transcription systems	

Week 5 - 04 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
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PHONETICS

FACE-TO-FACE CONTENT:

- Practice phonemic transcriptions
- Understanding the practical application of skills and knowledge acquired this term in a clinical speech pathology setting
- Introduction to phonetic (narrow) transcription of Australian English vowels

Cox, F & Fletcher, J. (2017)
 • Chapter 5 Narrow transcription of Australian English

RECORDED CONTENT / ACTIVITIES:

- One H5P activity is on Moodle, but it contains three different tasks
- A paper based writing task is provided in class to be handed in before class in week 6
- In preparation for the online quiz and the in-class test, revise the exercises in chapter 4 of your textbook

Vacation Week - 11 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
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Week 6 - 18 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
PHONETICS FACE-TO-FACE CONTENT: <ul style="list-style-type: none"> • Revision of content to date • Practice transcriptions RECORDED CONTENT / ACTIVITIES: <ul style="list-style-type: none"> • There are no recorded lectures or activities for this week. You need to concentrate on preparation for your assessment tasks. 		<p>In-class test 1 is on Tuesday 19 April at 3pm. This test is one hour in length.</p> <p>Online quiz 1 opens Wednesday 20 April at 8am and closes Friday 22 April at 11:55pm</p>

Week 7 - 25 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
PHONETICS FACE-TO-FACE CONTENT: <ul style="list-style-type: none"> • Diacritics • Phonetic (narrow) transcription of Australian English continued • The practical application of phonetics to speech pathology RECORDED CONTENT / ACTIVITIES: <ul style="list-style-type: none"> • H5P activities on diacritics • Revision exercises from Chapter 5 of your textbook 	<p>Cox, F & Fletcher, J. (2017) • Chapter5 Narrow transcription of Australian English</p>	

Week 8 - 02 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
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PHONETICS

FACE-TO-FACE CONTENT:

- Diacritics continued
- Phonetic (narrow) transcription of Australian English continued
- More phonetic transcription practice, using both the Mitchell Delbridge (MD) and the Harrington Cox Evans (HCE) systems
- Practical application of phonetics to speech pathology continued

RECORDED CONTENT / ACTIVITIES:

- You will be provided with paper based tasks to complete which focus on use of diacritics in narrow transcription of Australian English and the selection of appropriate International Phonetic Alphabet (IPA) symbols when appropriate

Week 9 - 09 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
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PHONETICS

FACE-TO-FACE CONTENT:

- Continue with understanding the practical application of skills and knowledge acquired this term in a clinical speech pathology setting
- Transcription practice using diacritics
- Practice at transcribing disordered speech using relevant diacritics and IPA symbols

RECORDED CONTENT / ACTIVITIES:

- A video of a child is placed on Moodle for you to transcribe and provide your transcription to the lecturer before class the following week

Week 10 - 16 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
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ACOUSTICS (Lecturer: Barbra Zupan)

NOTE: For Weeks 10-12, you will need to watch the recorded lectures and complete the online activities **BEFORE** attending your face-to-face tutorial.

RECORDED CONTENT / ACTIVITIES:

- Introduction to Acoustics
- Suprasegmentals
- What is Sound?

FACE-TO-FACE CONTENT:

- Unpacking concepts related to sound

Week 11 - 23 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
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ACOUSTICS (Lecturer: Barbra Zupan)

NOTE: For Weeks 10-12, you will need to watch the recorded lectures and complete the online activities

BEFORE attending your face-to-face tutorial.

RECORDED CONTENT / ACTIVITIES:

- Complex Sounds
- Attributes of Sound (Frequency, Intensity, Resonance)
- Source Filter Theory

FACE-TO-FACE CONTENT:

- Attributes of Sound and Relationship to Speech Pathology

You will need to download Praat prior to the tutorial in Week 11. We will spend some time in Week 11 learning how to use Praat, including how to record some voice samples which you will use in Week 12.

You can download Praat (for Windows or Mac) for free at:
<https://www.fon.hum.uva.nl/praat/>

Week 12 - 30 May 2022

Module/Topic

Chapter

Events and Submissions/Topic

ACOUSTICS (Lecturer: Barbra Zupan)

NOTE: For Weeks 10-12, you will need to watch the recorded lectures and complete the online activities **BEFORE** attending your face-to-face tutorial.

RECORDED CONTENT / ACTIVITIES:

- Acoustic Characteristics of Vowels
- Acoustic Characteristics of Consonants

FACE-TO-FACE CONTENT:

- Using Praat to Explore Acoustic Characteristics of Vowels and Consonants
- Review of Acoustics concepts learned from Weeks 10-12

Online quiz 2 opens Wednesday 1 June at 9am and closes Friday 3 June at 11:55pm

Review/Exam Week - 06 Jun 2022

Module/Topic

Chapter

Events and Submissions/Topic

In-class test 2 is scheduled for 3pm Tuesday 7 June. The duration of this test is one hour.

Exam Week - 13 Jun 2022

Module/Topic

Chapter

Events and Submissions/Topic

Term Specific Information

Welcome to SPCH13005 Acoustics and Phonetics for 2021. Tina Janes is your unit coordinator and lecturer for phonetics and Barbra Zupan is your lecturer for the acoustics section of this unit. In 2022, the unit will include one face-to-face tutorial each week. The remaining content will be made available to you via recorded lectures and a series of online activities for you to complete independently. Weeks 1 to 9 will be your phonetics content and weeks 10-12 will be your acoustics content. This is a challenging but fun unit and I hope you enjoy learning all about acoustics and phonetics. Your textbook for phonetics is:

- Cox, F., & Fletcher, J. (2017). Australian English pronunciation and transcription. Cambridge University Press.

Any additional readings for the unit will be placed in your e-Reading list on Moodle.

Tina will be available for *drop-in* Tuesdays 11am to 1pm and Fridays 8am to 9am and 1pm to 2:30pm. You are welcome to *drop-in* if you have any questions or concerns you wish to raise. Tina's office is Building 7/G.16.

Assessment Tasks

1 ONLINE QUIZZES

Assessment Type

Online Quiz(zes)

Task Description

There are two online quizzes for this unit, each worth 25% of your final grade.

- The first quiz will open Wednesday 20 April (week 6) at 8am and close on Friday 22 April at 11:55pm. The first quiz will assess the phonetics content from weeks 1 to 6.
- The second quiz will open Wednesday 1 June (week 12) at 8am and close on Friday 3 June at 11:55pm. The second quiz will assess both phonetic and acoustic content up to and including week 12.

You are allowed one hour to complete each quiz.

Number of Quizzes

2

Frequency of Quizzes

Other

Assessment Due Date

The dates for the quizzes are stated in the Task Description and on Moodle.

Return Date to Students

Feedback will be provided to students within two weeks following the quizzes.

Weighting

50%

Minimum mark or grade

A minimum grade of 50% overall (i.e., 25/50) is required to pass this assessment task and the unit.

Assessment Criteria

The marks attached to each question are stipulated on the quiz. The quizzes will include a range of question types such as multiple choice, short answer and matching. This is a must pass assessment task that requires you to achieve an overall passing grade (50%) across the two quizzes. That is, when the grade from Quiz 1 and Quiz 2 are added together, you need a total minimum grade of 50% (25/50).

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Submission Instructions

Quizzes need to be completed via Moodle.

Learning Outcomes Assessed

- Use anatomical knowledge of the shape and formation of the vocal tract to describe and acoustically analyse speech
- Identify and describe acoustic principles and properties related to speech.

2 IN-CLASS TESTS

Assessment Type

In-class Test(s)

Task Description

This unit has two in-class tests.

- The first in-class test will occur on Tuesday 19 April (week 6) at 3pm and will include only your phonetics content to date.
- The second in-class test is on Tuesday 7 June (review/exam week) at 3pm and will include phonetics and acoustics content from week 7 to week 12

You will have a maximum of 1 hour to complete each in-class test.

Assessment Due Date

Dates for each in-class test is provided in the Task Description and on Moodle.

Return Date to Students

Feedback will be provided to the students within two weeks following the test.

Weighting

50%

Minimum mark or grade

A minimum grade of 50% overall (i.e., 25/50) is required to pass this assessment task and the unit.

Assessment Criteria

The marks awarded are displayed beside each question and allocated according to the complexity of the question. The in-class tests will have a variety of question types (short answer, diagrams, labelling etc.) and you will be required to do 'live' transcriptions of utterances spoken by children and adults. These utterances will include both normal samples and disordered samples. This is a must pass assessment task that requires you to achieve an overall passing grade (50%) across the two in-class tests. That is, when the grade from Quiz 1 and Quiz 2 are added together, you need a total minimum grade of 50% (25/50).

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Offline

Learning Outcomes Assessed

- Phonetically transcribe Australian English connected speech using International Phonetic Association symbols and Australian vowel symbols
- Identify and describe acoustic principles and properties related to speech.

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem