



# CAUD807

## Paediatric Hearing Assessment

S2 Day 2019

*Dept of Linguistics*

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#### **Disclaimer**

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## General Information

Unit convenor and teaching staff

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Credit points

4

Prerequisites

CAUD802 and CAUD803 and CAUD819

Corequisites

Co-badged status

Unit description

This unit aims to build skills in the audiological assessment and clinical management of infants and children. Through lectures and clinical practicums, skills in the audiological assessment of infants and preschoolers are gained. Normal child development, including speech and language development, is explored. Causes of hearing loss in children, the effects of hearing loss, and treatment options are considered. Throughout the unit, students are encouraged to consider information that is presented from a family systems' perspective.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

## Learning Outcomes

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

- Demonstrate an understanding of the principles and approaches to paediatric assessment across the age range
- Critically review the theoretical and practical aspects of hearing assessment infants and children, including the skill to determine the most appropriate assessment techniques for particular children
- Understand the overall development of each infant / child and its influence on service delivery

- Develop skills in result interpretation and in the differential diagnosis of disorders
- Develop an understanding of professional collaboration in paediatric service delivery and appropriate treatment options for children with different hearing losses.
- Recognise the role of genetics and embryology in the development of the peripheral auditory system.
- Describe common pathologies and the clinical course of common syndromes/diseases/injuries involving the peripheral auditory system.
- Demonstrate an understanding of the medical treatment of common diseases/injuries of the peripheral auditory system.
- Describe the major areas of developmental disability.
- Name risk factors for hearing loss in children.
- Describe the motivations for neonatal hearing screening systems in Australia and abroad.
- Demonstrate an understanding of hearing screening principles and applications with paediatric and adult groups.
- Identify test technique modifications for clients with special needs.
- Assess client and tester variables that may influence results and amends test procedures accordingly.
- Select and interpret appropriate physiologic tests of auditory function for children, including tympanometry and acoustic reflexes, OAEs, ABR, ASSR, and cortical auditory evoked response.
- Select and interpret developmentally appropriate behavioural tests of hearing for children, including behavioural observation audiometry (BOA), visual reinforcement audiometry (VRA) and play audiometry.
- Evaluate the consistency of results across the test battery and recommends further action for resolution of inconsistencies.
- Describe the psychosocial impacts of hearing loss on the individual and their family.
- Describe affective counselling techniques that are used to achieve appropriate rehabilitative outcomes with respect to the psychosocial impact of hearing loss.
- Identify the audiological and educational implications of Otitis Media in the general paediatric population and in high risk groups.
- Describe family-centred practice and informed choice.
- Recognise the social/civic responsibilities and recognises the Audiologist's role as advocate for clients with hearing loss and their families.
- Describe the social and political context of audiological service delivery in Australia.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<u>Causes of Hearing Loss</u>	15%	No	August
<u>On Line Quiz</u>	20%	No	October
<u>Hearing Screening Assignment</u>	25%	No	October
<u>Final Exam</u>	40%	No	Within University exam period

### Causes of Hearing Loss

Due: **August**

Weighting: **15%**

See iLearn for details

On successful completion you will be able to:

- Demonstrate an understanding of the principles and approaches to paediatric assessment across the age range
- Critically review the theoretical and practical aspects of hearing assessment infants and children, including the skill to determine the most appropriate assessment techniques for particular children
- Understand the overall development of each infant / child and its influence on service delivery
- Recognise the role of genetics and embryology in the development of the peripheral auditory system.
- Describe common pathologies and the clinical course of common syndromes/ diseases/injuries involving the peripheral auditory system.
- Demonstrate an understanding of the medical treatment of common diseases/injuries of the peripheral auditory system.
- Describe the major areas of developmental disability.
- Identify test technique modifications for clients with special needs.
- Select and interpret developmentally appropriate behavioural tests of hearing for children, including behavioural observation audiometry (BOA), visual reinforcement audiometry (VRA) and play audiometry.

## On Line Quiz

Due: **October**

Weighting: **20%**

The online quiz will cover the lecture notes and readings from **topic 1** to topic 8 inclusive.

The quiz will be accessed through iLearn. You will have 2 hours in which to complete the quiz.

On successful completion you will be able to:

- • Demonstrate an understanding of the principles and approaches to paediatric assessment across the age range
- • Critically review the theoretical and practical aspects of hearing assessment infants and children, including the skill to determine the most appropriate assessment techniques for particular children
- • Understand the overall development of each infant / child and its influence on service delivery
- • Develop skills in result interpretation and in the differential diagnosis of disorders
- • Recognise the role of genetics and embryology in the development of the peripheral auditory system.
- • Describe common pathologies and the clinical course of common syndromes/ diseases/injuries involving the peripheral auditory system.
- • Demonstrate an understanding of the medical treatment of common diseases/injuries of the peripheral auditory system.
- • Name risk factors for hearing loss in children.
- • Select and interpret developmentally appropriate behavioural tests of hearing for children, including behavioural observation audiometry (BOA), visual reinforcement audiometry (VRA) and play audiometry.
- • Describe the psychosocial impacts of hearing loss on the individual and their family.
- • Describe affective counselling techniques that are used to achieve appropriate rehabilitative outcomes with respect to the psychosocial impact of hearing loss.
- • Describe family-centred practice and informed choice.

## Hearing Screening Assignment

Due: **October**

Weighting: **25%**

This assignment discusses hearing screening protocols for Australia and developing countries.

Further details are provided through iLearn.

On successful completion you will be able to:

- • Demonstrate an understanding of the principles and approaches to paediatric assessment across the age range
- • Critically review the theoretical and practical aspects of hearing assessment infants and children, including the skill to determine the most appropriate assessment techniques for particular children
- • Name risk factors for hearing loss in children.
- • Describe the motivations for neonatal hearing screening systems in Australia and abroad.
- • Demonstrate an understanding of hearing screening principles and applications with paediatric and adult groups.
- • Select and interpret developmentally appropriate behavioural tests of hearing for children, including behavioural observation audiometry (BOA), visual reinforcement audiometry (VRA) and play audiometry.
- • Recognise the social/civic responsibilities and recognises the Audiologist's role as advocate for clients with hearing loss and their families.
- • Describe the social and political context of audiological service delivery in Australia.

## Final Exam

Due: **Within University exam period**

Weighting: **40%**

This is a 3 hour exam with 10 minutes reading time that covers all the material covered in the unit. Examples of past exams can be found through the library website.

On successful completion you will be able to:

- • Demonstrate an understanding of the principles and approaches to paediatric assessment across the age range
- • Critically review the theoretical and practical aspects of hearing assessment infants and children, including the skill to determine the most appropriate assessment techniques for particular children
- • Understand the overall development of each infant / child and its influence on service delivery
- • Develop skills in result interpretation and in the differential diagnosis of disorders
- • Develop an understanding of professional collaboration in paediatric service delivery

and appropriate treatment options for children with different hearing losses.

- • Recognise the role of genetics and embryology in the development of the peripheral auditory system.
- • Describe the major areas of developmental disability.
- • Name risk factors for hearing loss in children.
- • Describe the motivations for neonatal hearing screening systems in Australia and abroad.
- • Demonstrate an understanding of hearing screening principles and applications with paediatric and adult groups.
- • Identify test technique modifications for clients with special needs.
- • Assess client and tester variables that may influence results and amends test procedures accordingly.
- • Select and interpret appropriate physiologic tests of auditory function for children, including tympanometry and acoustic reflexes, OAEs, ABR, ASSR, and cortical auditory evoked response.
- • Select and interpret developmentally appropriate behavioural tests of hearing for children, including behavioural observation audiometry (BOA), visual reinforcement audiometry (VRA) and play audiometry.
- • Evaluate the consistency of results across the test battery and recommends further action for resolution of inconsistencies.
- • Describe the psychosocial impacts of hearing loss on the individual and their family.
- • Describe affective counselling techniques that are used to achieve appropriate rehabilitative outcomes with respect to the psychosocial impact of hearing loss.
- • Identify the audiological and educational implications of Otitis Media in the general paediatric population and in high risk groups.
- • Describe family-centred practice and informed choice.
- • Recognise the social/civic responsibilities and recognises the Audiologist's role as advocate for clients with hearing loss and their families.
- • Describe the social and political context of audiological service delivery in Australia.

## **Delivery and Resources**

- Lectures are generally convened on Wednesday 9am-12pm and Thursday from 2-5pm. However, there are some variations to this schedule. Therefore, students must consult the Timetable and iLearn for any changes
- Lectures given by Macquarie University staff will be recorded through ECHO
- Guest Lectures WILL NOT be recorded

## Unit Schedule

Week	Topic	Activities
1	Introduction to Difficult-to-Test Populations	Face-to-face lecture
	Embryology	Video content & Consolidation
	Genetics	Video content & Consolidation
2	Developmental Milestones	Video content & Consolidation
	Assessment 1: Behavioural Measures of Hearing	Video Content & Consolidation; Practicum
3	Assessment 2: Speech testing	Video Content & Consolidation; Practicum
	Assessment 3: Electrophysiological Measures of Hearing	Video Content & Consolidation
4	Disorders Associated with Hearing Loss	Video Content & Consolidation
	Screening	Video content & Consolidation
5	Consolidation and Cases	Face-to-face session
	Collaborations with other Disciplines-Guests	Face-to-face session
6	Unilateral and Minimal Hearing losses	Video Content & Consolidation
	Collaborations with other Disciplines-Guests	Face-to-face session

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central\)](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)



- [Special Consideration Policy](#) (**Note:** The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.)

Undergraduate students seeking more policy resources can visit the [Student Policy Gateway](https://students.mq.edu.au/support/study/student-policy-gateway) (<https://students.mq.edu.au/support/study/student-policy-gateway>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit [Policy Central](http://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<http://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>).

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/study/getting-started/student-conduct>

## Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit [ask.mq.edu.au](http://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

## Learning Skills

Learning Skills ([mq.edu.au/learningskills](http://mq.edu.au/learningskills)) provides academic writing resources and study strategies to improve your marks and take control of your study.

- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module for Students](#)
- [Ask a Learning Adviser](#)

## Student Services and Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at [ask.mq.edu.au](http://ask.mq.edu.au)

If you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

## Graduate Capabilities

### PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

#### Learning outcomes

- Critically review the theoretical and practical aspects of hearing assessment infants and children, including the skill to determine the most appropriate assessment techniques for particular children
- Develop skills in result interpretation and in the differential diagnosis of disorders
- Develop an understanding of professional collaboration in paediatric service delivery and appropriate treatment options for children with different hearing losses.
- Describe the motivations for neonatal hearing screening systems in Australia and abroad.
- Demonstrate an understanding of hearing screening principles and applications with paediatric and adult groups.
- Identify test technique modifications for clients with special needs.
- Assess client and tester variables that may influence results and amends test procedures accordingly.
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- Evaluate the consistency of results across the test battery and recommends further action for resolution of inconsistencies.

- • Describe the psychosocial impacts of hearing loss on the individual and their family.
- • Describe affective counselling techniques that are used to achieve appropriate rehabilitative outcomes with respect to the psychosocial impact of hearing loss.
- • Identify the audiological and educational implications of Otitis Media in the general paediatric population and in high risk groups.
- • Describe family-centred practice and informed choice.

## **Assessment tasks**

- Causes of Hearing Loss
- On Line Quiz
- Hearing Screening Assignment
- Final Exam

## **PG - Discipline Knowledge and Skills**

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

## **Learning outcomes**

- • Demonstrate an understanding of the principles and approaches to paediatric assessment across the age range
- • Critically review the theoretical and practical aspects of hearing assessment infants and children, including the skill to determine the most appropriate assessment techniques for particular children
- • Understand the overall development of each infant / child and its influence on service delivery
- • Develop skills in result interpretation and in the differential diagnosis of disorders
- • Develop an understanding of professional collaboration in paediatric service delivery and appropriate treatment options for children with different hearing losses.
- • Recognise the role of genetics and embryology in the development of the peripheral auditory system.
- • Describe common pathologies and the clinical course of common syndromes/ diseases/injuries involving the peripheral auditory system.
- • Demonstrate an understanding of the medical treatment of common diseases/injuries of the peripheral auditory system.
- • Describe the major areas of developmental disability.

- • Name risk factors for hearing loss in children.
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- • Describe affective counselling techniques that are used to achieve appropriate rehabilitative outcomes with respect to the psychosocial impact of hearing loss.
- • Identify the audiological and educational implications of Otitis Media in the general paediatric population and in high risk groups.
- • Describe family-centred practice and informed choice.
- • Recognise the social/civic responsibilities and recognises the Audiologist's role as advocate for clients with hearing loss and their families.
- • Describe the social and political context of audiological service delivery in Australia.

## **Assessment tasks**

- Causes of Hearing Loss
- On Line Quiz
- Hearing Screening Assignment
- Final Exam

## **PG - Critical, Analytical and Integrative Thinking**

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based

critique of practice and theory.

This graduate capability is supported by:

## **Learning outcomes**

- Critically review the theoretical and practical aspects of hearing assessment infants and children, including the skill to determine the most appropriate assessment techniques for particular children
- Develop skills in result interpretation and in the differential diagnosis of disorders
- Develop an understanding of professional collaboration in paediatric service delivery and appropriate treatment options for children with different hearing losses.
- Identify test technique modifications for clients with special needs.
- Assess client and tester variables that may influence results and amends test procedures accordingly.
- Select and interpret appropriate physiologic tests of auditory function for children, including tympanometry and acoustic reflexes, OAEs, ABR, ASSR, and cortical auditory evoked response.
- Select and interpret developmentally appropriate behavioural tests of hearing for children, including behavioural observation audiometry (BOA), visual reinforcement audiometry (VRA) and play audiometry.
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- Describe affective counselling techniques that are used to achieve appropriate rehabilitative outcomes with respect to the psychosocial impact of hearing loss.
- Identify the audiological and educational implications of Otitis Media in the general paediatric population and in high risk groups.
- Describe family-centred practice and informed choice.

## **Assessment tasks**

- Causes of Hearing Loss
- On Line Quiz
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- Final Exam

## **PG - Research and Problem Solving Capability**

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or

practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

## **Learning outcomes**

- Identify test technique modifications for clients with special needs.
- Assess client and tester variables that may influence results and amends test procedures accordingly.
- Evaluate the consistency of results across the test battery and recommends further action for resolution of inconsistencies.
- Describe affective counselling techniques that are used to achieve appropriate rehabilitative outcomes with respect to the psychosocial impact of hearing loss.

## **Assessment tasks**

- Causes of Hearing Loss
- On Line Quiz
- Final Exam

## **PG - Effective Communication**

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

## **Learning outcomes**

- Develop an understanding of professional collaboration in paediatric service delivery and appropriate treatment options for children with different hearing losses.
- Describe the psychosocial impacts of hearing loss on the individual and their family.
- Describe affective counselling techniques that are used to achieve appropriate rehabilitative outcomes with respect to the psychosocial impact of hearing loss.
- Describe family-centred practice and informed choice.
- Recognise the social/civic responsibilities and recognises the Audiologist's role as advocate for clients with hearing loss and their families.
- Describe the social and political context of audiological service delivery in Australia.

## **Assessment tasks**

- On Line Quiz
- Hearing Screening Assignment

- Final Exam

## PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

### Learning outcomes

- • Develop an understanding of professional collaboration in paediatric service delivery and appropriate treatment options for children with different hearing losses.
- • Describe the motivations for neonatal hearing screening systems in Australia and abroad.
- • Demonstrate an understanding of hearing screening principles and applications with paediatric and adult groups.
- • Identify test technique modifications for clients with special needs.
- • Assess client and tester variables that may influence results and amends test procedures accordingly.
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- • Describe the social and political context of audiological service delivery in Australia.

### Assessment tasks

- Causes of Hearing Loss
- On Line Quiz
- Hearing Screening Assignment
- Final Exam