

# **CAUD8010**

# **Advanced Hearing Devices**

Session 1, In person-scheduled-weekday, North Ryde 2022

Department of Linguistics

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#### Disclaimer

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#### **General Information**

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Credit points

10

Prerequisites

(CAUD805 or CAUD8005) and (CAUD806 or CAUD8006) and (CAUD807 or CAUD8007)

Corequisites

Co-badged status

Unit description

This unit aims to equip students with a deep understanding of and the ability to evaluate the applications of hearing aids, implantable devices, and assistive listening systems. The unit develops students' understanding of the mechanisms by which hearing devices meet the needs of hearing impaired people and the evidence for the effectiveness of a variety of technologies. In a wider sense this unit aims to equip students with the skills and information needed to evaluate existing and emerging hearing device technologies to provide evidence-based treatment.

#### Important Academic Dates

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

# **Learning Outcomes**

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

**ULO1:** Extend basic knowledge acquired in CAUD8005 to a more in-depth understanding of the complex technological features of modern hearing devices.

**ULO2:** Examine and appraise signal processing; its importance in regulating the advanced features of hearing devices and its strengths and limitations

**ULO3:** Debate and critically evaluate the clinical benefits/efficacy of hearing device technology

**ULO4:** Translate theoretical knowledge to technical skills, and practical aspects of hearing device selection and fitting.

**ULO5:** Implement knowledge and skills to facilitate clinical practice including; fitting, verifying, measuring the outcomes and evaluating future technologies of hearing devices

#### **Assessment Tasks**

| Name                      | Weighting | Hurdle | Due         |
|---------------------------|-----------|--------|-------------|
| Client fitting assignment | 35%       | No     | 19/4/22     |
| Group project             | 20%       | No     | 23/5/22     |
| Participation             | 5%        | No     | 6/6/22      |
| Final examination         | 40%       | No     | Exam period |

## Client fitting assignment

Assessment Type 1: Case study/analysis Indicative Time on Task 2: 30 hours

Due: **19/4/22** Weighting: **35%** 

Students will be assigned a client with a particular hearing loss and background, appropriate hearing aid and implantable devices must be selected and discussed. Use of specific technologies must be justified.

On successful completion you will be able to:

- Extend basic knowledge acquired in CAUD8005 to a more in-depth understanding of the complex technological features of modern hearing devices.
- Examine and appraise signal processing; its importance in regulating the advanced features of hearing devices and its strengths and limitations
- Debate and critically evaluate the clinical benefits/efficacy of hearing device technology
- Translate theoretical knowledge to technical skills, and practical aspects of hearing device selection and fitting.
- Implement knowledge and skills to facilitate clinical practice including; fitting, verifying,
  measuring the outcomes and evaluating future technologies of hearing devices

#### Group project

Assessment Type 1: Project Indicative Time on Task 2: 15 hours

Due: **23/5/22** Weighting: **20%** 

Students will work in groups to examine the practicalities of setting up a private practice. There are many issues in running a successful business. However, this group project aims to focus on 3 issues which are: (1) securing income; (2) controlling expenses; and (3) complying with regulations. Further details will be provided.

On successful completion you will be able to:

 Translate theoretical knowledge to technical skills, and practical aspects of hearing device selection and fitting.

# Participation

Assessment Type 1: Participatory task Indicative Time on Task 2: 5 hours

Due: **6/6/22** Weighting: **5%** 

Participation in this unit will attract 5% of the units' total marks. Participation will be marked based upon completion of activities on this units iLearn page. Activities include forum posts, and quizzes.

On successful completion you will be able to:

- Examine and appraise signal processing; its importance in regulating the advanced features of hearing devices and its strengths and limitations
- Debate and critically evaluate the clinical benefits/efficacy of hearing device technology
- Translate theoretical knowledge to technical skills, and practical aspects of hearing device selection and fitting.

#### Final examination

Assessment Type 1: Examination Indicative Time on Task 2: 25 hours

Due: **Exam period** Weighting: **40%** 

Long and short answers.

On successful completion you will be able to:

- Extend basic knowledge acquired in CAUD8005 to a more in-depth understanding of the complex technological features of modern hearing devices.
- Examine and appraise signal processing; its importance in regulating the advanced features of hearing devices and its strengths and limitations
- Debate and critically evaluate the clinical benefits/efficacy of hearing device technology
- Translate theoretical knowledge to technical skills, and practical aspects of hearing device selection and fitting.

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

## **Delivery and Resources**

#### Technology

Work will require basic general computer skills. Some knowledge of Audiology specific technology such as audiometers, real-ear fitting hardware and software is assumed (CAUD8005 is a pre-requisite and should furnish the requisite skills). No additional technology is required.

#### Information

iLearn will predominantly be used for communication, provision of lecture materials and discussion. Please check iLearn frequently for any updates.

#### **Policies and Procedures**

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

<sup>&</sup>lt;sup>1</sup> If you need help with your assignment, please contact:

<sup>&</sup>lt;sup>2</sup> Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- · Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.e du.au) and use the search tool.

#### **Student Code of Conduct**

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

#### Results

Results published on platform other than <u>eStudent</u>, (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 <u>eStudent</u>. For more information visit <u>ask.mq.edu.au</u> or if you are a Global MBA student contact globalmba.support@mq.edu.au

#### **Academic Integrity**

At Macquarie, we believe <u>academic integrity</u> – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free <u>online writing and maths support</u>, academic skills development and wellbeing consultations.

## Student Support

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

#### **The Writing Centre**

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader

- Access StudyWISE
- · Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

#### Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- · Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- · Social support including information about finances, tenancy and legal issues

#### Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

## IT Help

For help with University computer systems and technology, visit <a href="http://www.mq.edu.au/about\_us/">http://www.mq.edu.au/about\_us/</a> offices\_and\_units/information\_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.