



CORE KNOWLEDGE AND COMPETENCIES REQUIRED OF MASTER OF AUDIOLOGY GRADUATES IN AUSTRALIA

**Version 2.0
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This Audiology Australia Core Knowledge and Competencies (CKC) document summarizes the minimum CKCs required by Audiology Australia of graduates of accredited master of audiology programs in Australia. It was approved by the Audiology Australia via its University Accreditation Council (AAUAC) on 05 April, 2016.

The CKCs are divided into two types:

Knowledge-based	Considered to be predominantly knowledge-based and more likely to be examined in theory (but could be examined by other means).
Skills-based	Considered to be predominantly skills-based and more likely to be examined in practice (but could be examined by other means).

Each accredited master of audiology program in Australia must show that its graduates have achieved each CKC to one of two levels:

Competent (C)	The graduate would need limited to no supervision to complete this competency in professional practice.
Developing (D)	The graduate would need substantial to some supervision to complete this competency in professional practice.

Terminology

The following verb is used when describing the CKCs considered to be predominantly knowledge-based: *understands (to become aware of the nature and significance of; to know or comprehend)*. The following verbs are used when describing the CKCs considered to be predominantly skills-based: *performs, interviews, selects, develops, evaluates, analyses, produces, identifies, records, instructs, applies, uses, troubleshoots, recommends, recognises, behaves, demonstrates, collects, organizes, and critically evaluates*. These verbs represent a spread of the same or similar verbs used within Anderson et al's (2000) taxonomy for learning, teaching, and assessing: a revision of bloom's taxonomy of educational objectives, and were chosen to cover the six components of this taxonomy: 1. Knowledge, 2. Comprehension, 3. Application, 4. Analysis, 5. Synthesis, and 6. Evaluation.

Development

This document was developed by Audiology Australia in consultation with Australian members of the Australian and New Zealand Audiology Programs (ANZAPs) group from a document originally developed by Dr Carlie Driscoll and staff from the Master of Audiology Studies program at The University of Queensland in 2007. Its first version was approved by Audiology Australia via its

University Accreditation Committee (AAUAC) in September, 2009, for use in Audiology Australia's process for accrediting audiology programs in Australia from 2010 to 2014. The current, second version of the document was approved by Audiology Australia via its University Accreditation Committee (AAUAC) on 05 April, 2016, for use in Audiology Australia's process for accrediting audiology programs in Australia from 2015 to 2019.

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References

Anderson, L.W., Krathwohl, D.R. Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Rath, J., & Wittrock, M.C. (2000). A taxonomy for learning, teaching, and assessing: A revision of bloom's taxonomy of educational objectives (Complete edition). London: Pearson. ISBN-10: 0321084055. ISBN-13: 978-0321084057.

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I. Foundations of Audiology		Knowledge	Skill
1.	Understands the principles, methods & applications of acoustics as related to audiology	C	
2.	Understands the principles, methods & applications of psychoacoustics as related to audiology	C	
3.	Understands the principles & clinical applications of acoustic phonetics	C	
4.	Understands the anatomy & physiology of the peripheral auditory system	C	
5.	Understands the anatomy & physiology of the central auditory system	C	
6.	Understands the anatomy & physiology of the vestibular system	C	
7.	Understands the anatomy & physiology of the speech production & speech reception systems	D	
8.	Understands the genetics, embryology & development of the peripheral auditory, central auditory & vestibular systems	D	
9.	Understands the basic mechanisms of disease & injury	C	
10.	Understands common syndromes/diseases/injuries involving the peripheral auditory, central auditory & vestibular systems	C	
11.	Understands common syndromes/diseases/injuries of the speech production & reception systems	D	
12.	Understands the medical & surgical treatment of common syndromes/diseases/injuries of the peripheral auditory, central auditory & vestibular systems	D	
13.	Understands the principles of primary health care & the social determinants of health	D	
14.	Understands the major areas of developmental disability	D	
15.	Understands the normal development of audition & its course over the lifespan	C	
16.	Understands the normal development of speech & language & its course over the lifespan	C	
17.	Understands basic epidemiological terms & epidemiological information about hearing loss & tinnitus	D	
18.	Understands health care & education delivery systems	D	

II. Hearing Screening & Conservation		Knowledge	Skill
1.	Understands risk factors for hearing loss in children & adults	C	
2.	Understands the principles & applications of hearing conservation in children & adults	C	
3.	Understands the principles & applications of hearing screening in children & adults	C	
4.	Performs hearing screening on paediatric & adult clients		C

III. Diagnostic Evaluation	Knowledge	Skill
1. Understands the interview of the client/family/carer/significant other to obtain an appropriate, in-depth case history relevant to audiological & client needs	C	
2. Interviews client/family/carer/significant other to obtain an appropriate, in-depth case history relevant to audiological & client needs		C
3. Understands the otoscopic examination & otoscopic issues that would affect an audiological assessment	C	
4. Performs an otoscopic examination & identifies otoscopic issues that would affect an audiological assessment		C
5. Understands the principles underpinning audiometric assessment techniques	C	
6. Selects appropriate audiometric tests & test batteries & justifies choices		C
7. Develops hypotheses regarding the probable type & site of lesion/dysfunction in clients with auditory symptoms		C
8. Evaluates the consistency of results across the basic audiological test battery & recommends further action to resolve inconsistencies &/or inadequacies		C
9. Analyses, integrates & interprets basic audiological test battery results to produce accurate diagnoses & management		C
10. Produces accurate, clear & concise reports/feedback including recommendations for management		C
11. Identifies appropriate referral to, & collaboration with, medical & other professionals		C
12. Understands diagnostic assessments for auditory processing disorders (APD)	C	
13. Performs diagnostic assessments for auditory processing disorders (APD)		C
14. Records client/family/carer/significant other information accurately, relevantly & systematically		C
15. Understands the clinical applications of medical imaging techniques such as (but not limited to) MRI, CAT & PET	D	

IV. Diagnostic Evaluations in Adults	Knowledge	Skill
1. Instructs the client in standard hearing test procedures & maintains the engagement of the client throughout the test appointment		C
2. Understands pure tone air & bone conduction testing & its appropriate masking	C	
3. Performs pure tone air & bone conduction testing, with appropriate masking when needed		C
4. Understands speech audiometry & its appropriate masking	C	
5. Performs speech audiometry, with appropriate masking when needed		C
6. Understands tympanometry & acoustic reflex testing	C	
7. Performs tympanometry & acoustic reflex testing		C
8. Understands otoacoustic emission (OAE) testing	C	

9. Performs otoacoustic emission (OAE) testing		C
10. Understands auditory brainstem response (ABR) testing	C	
11. Performs auditory brainstem response (ABR) testing		D
12. Understands other auditory electrophysiologic tests, including electrocochleography (ECoChG), auditory steady state response (ASSR), auditory evoked middle & late latency responses, & event related potentials, & their clinical applications	D	
13. Understands test battery protocols for assessment of vestibular function, including electronystagmography (ENG), caloric test & vestibular evoked myogenic potential (VEMP) & their clinical applications	D	
14. Understands assessment strategies for clients with tinnitus	C	

V. Diagnostic Evaluations in Children	Knowledge	Skill
1. Understands appropriate physiologic tests of auditory function for children, including tympanometry & acoustic reflexes, OAEs, ABR, ASSR & cortical auditory evoked response (CAER)	C	
2. Understands the principles of advanced acoustic immittance tests such as (but not limited to) multifrequency tympanometry & wideband absorbance	D	
3. Understands developmentally appropriate behavioural tests of hearing for children, including behavioural observation audiometry (BOA), visual reinforcement audiometry (VRA) & play audiometry	C	
4. Performs VRA as tester & distracter		D
5. Performs play audiometry, using air conduction, bone conduction & appropriate masking when needed		C
6. Understands developmental milestones in gross & fine motor skills for typically developing children from birth to 3 years	C	

VI. Re/habilitation	Knowledge	Skill
1. Understands the psychosocial impact of hearing loss on the individual & their family	C	
2. Understands candidacy criteria for hearing aid fitting, implantable devices & aural re/habilitation, & factors affecting outcomes	C	
3. Understands how to critically evaluate information from a variety of sources to decide on clinical actions with respect to hearing aid fitting	C	
4. Understands the role of technological features in selection & adjustment of hearing aids	C	
5. Applies knowledge of technological features in selection & adjustment of hearing aids		C
6. Understands how to select appropriate earmould features	C	
7. Performs impression procedures to produce earmoulds of manufacturable quality		C
8. Understands modifications of earmoulds/shells to improve	D	

hearing aid comfort & performance		
9. Understands prescriptive methods & non-prescriptive methods for setting electroacoustic properties of hearing aids	C	
10. Understands programming hardware & software of at least one major hearing aid manufacturer	C	
11. Uses programming hardware & software of at least one major hearing aid manufacturer		C
12. Evaluates hearing aid performance using test box measurements		C
13. Evaluates hearing aid fitting using real ear insertion gain measurements		C
14. Understands hearing aid fitting using aided threshold testing & aided speech testing & the limitations of these tests	D	
15. Understands how to interpret client's subjective responses to amplification & to modify fitting appropriately	C	
16. Interprets client's subjective responses to amplification & modifies fitting appropriately		C
17. Understands how to troubleshoot hearing aids	C	
18. Troubleshoots hearing aids		C
19. Understands implantable devices including cochlear implants & bone anchored hearing aids, their applications & their limitations	C	
20. Understands environmental modifications & compensatory strategies for enhanced speech understanding	C	
21. Recommends environmental modifications & compensatory strategies for enhanced speech understanding		C
22. Understands speech perception tests & their applications in re/habilitation	C	
23. Understands commonly used assistive listening devices including remote microphone & sound field amplification systems, their applications & their limitations	C	
24. Understands techniques for the management of tinnitus	C	
25. Understands the role of affective counselling in achieving appropriate rehabilitative outcomes & the role of counsels clients with respect to the psychosocial impact of their hearing loss	C	
26. Performs affective counselling to achieve appropriate rehabilitative outcomes & counsels clients with respect to the psychosocial impact of their hearing loss		D
27. Understands rehabilitative outcome measures	C	
28. Understands rehabilitation objectives based on measured outcomes	C	
29. Understands the issues & concerns of the Deaf Community/Deaf Movement	D	

VII. Rehabilitation in Adults		Knowledge	Skill
1.	Understands theories of aural rehabilitation	C	
2.	Understands the effects of hearing loss on speech perception & communication including activity limitations & participation restrictions	C	
3.	Performs a communication needs analysis to establish realistic rehabilitation goals & develops appropriate strategies		C
4.	Understands age-related conditions, including physical & cognitive, & how to modify delivery of rehabilitation program in light of these conditions	C	
5.	Understands the role of the audiologist in aged-care settings	C	
6.	Understands audiological & non-audiological factors that may influence use/acceptance of rehabilitation	C	
7.	Understands the range of activities involved in rehabilitative appointments, including assessment, fitting & follow-up	C	
8.	Understands community services available for assisting in the aural rehabilitation of adults with hearing loss &/or communication disorders	C	
9.	Understands appropriate individual or group communication training programs & their tailoring to client communication & psychosocial needs	C	
10.	Understands optimal communication strategies for client rehabilitation programs	C	
11.	Understands the management of implantable devices, including client selection, device programming, re/habilitation, & outcome assessment	C	

VIII. Re/habilitation in Children		Knowledge	Skill
1.	Understands the effects of hearing loss on development in children, particularly regarding speech perception, speech & language development & communication	C	
2.	Recognises the functional consequences of Auditory Processing Disorders & understands the principles of intervention & appropriate management strategies for these disorders	C	
3.	Understands the audiological & educational implications of Otitis Media in the general paediatric population & in high risk groups (e.g., Aboriginal & Torres Strait Islander children)	C	
4.	Understands the range of audiological management options available for children & young adults with all degrees & types of hearing impairment	C	
5.	Understands the range of educational & communication management options available for children & young adults with all degrees & types hearing impairment	D	
6.	Understands the process of hearing aid fitting & verification, including real ear measures & aided threshold testing	D	
7.	Understands the concepts of family-centred practice & informed choice	D	
8.	Understands counselling techniques for working with children & their families	D	

9. Understands appropriate environmental modifications & compensatory strategies for enhanced listening	D
10. Understands how to manage implantable device recipients, including device programming, re/habilitation, & outcome assessment	D

IX. Professional practice	Knowledge	Skill
1. Understands Audiology Australia's Code of Ethics, Code of Conduct & Professional Practice Standards	C	
2. Behaves in manner consistent with Audiology Australia's Code of Ethics, Code of Conduct & Professional Practice Standards		C
3. Understands the role of research & concept of evidenced-based practice & applies it to clinical decision making	C	
4. Demonstrates appropriate interpersonal & communicative skills with others in the professional environment		C
5. Collects, analyses & organises information & ideas & conveys those ideas clearly & fluently, in written & oral form		C
6. Selects & uses the appropriate level, style & means of communication		C
7. Understands the ethical & practical implications of conducting research in the health professions	C	
8. Understands the fundamental research processes involved in planning, conducting, & disseminating the results of a research project	C	
9. Understands the principles of experimental design & quantitative & qualitative research methodology	D	
10. Understands how to critically evaluate published research for scientific validity & clinical applicability	C	
11. Critically evaluates published research for scientific validity & clinical applicability		C

Note: while a proportion of a graduate audiologist's time may be spent in management, support from senior or supervising audiologists and an employer's managerial staff would be required as it is not considered appropriate for a newly graduated audiologist to single-handedly manage an audiology service.