Master of Speech Language Pathology

Assumed Knowledge

Faculty of Health Sciences
Master of Speech Language Pathology

Assumed knowledge - 2019

When you commence your studies in the Master of Speech Language Pathology it will be assumed that you have reached a certain level of knowledge or skills in four areas of assumed knowledge. You are advised against taking a unit of study or course for which you do not have the assumed knowledge. The four areas of assumed knowledge are:

1. **Linguistics.** Phonology, morphology, semantics discourse, grammar/syntax, orthography, sociolinguistic, and psycholinguistic models of language.

2. **Phonetics.** Be able to correctly transcribe in real-time broad (phonemic) transcription of adult and child English using the International Phonetics Alphabet and appropriate diacritics for clinical evaluation. In addition, the theoretical concepts of allophones, distinctive feature analysis, diacritics, stress, accent, suprasegmental aspects of speech, and the acoustic features of vowels and consonants.

3. **Functional Anatomy of the Speech System.** Anatomy of the head and neck including those necessary for speech, swallowing, respiration and hearing. The following areas of the human body should be studied - bones of the head, auditory system, neck, and torso as well as the joints, muscles and nerves of the brain, head, face, larynx, pharynx, and respiratory systems.

4. **Functional Neurology of the Speech System.** Functional anatomy and physiology of neural structures as well as fundamental concepts of nervous system function necessary for speech, language, hearing, and swallowing.

If you do not have the assumed knowledge for the Master of Speech Language Pathology the University strongly recommends that you do not commence the degree until you have undertaken studies in these areas.

The University does provides online courses that cover the assumed knowledge that you will need before commencing your studies in the Master of Speech Language Pathology. The modules are offered from November to February.

Below is more detailed information describing the assumed knowledge needed for the Master of Speech Language Pathology. If you do not wish to complete the online modules there are also some examples of units from Australian and International universities that will provide you with the assumed knowledge needed for the Master of Speech Language Pathology.

**Assumed Knowledge**

**Linguistics – knowledge and practical skills required**

**Morphology, word structure**

- Grammar\(^1\) - traditional framework for grammar analysis; clause level analysis; phrase level analysis; word level analysis; complex clauses;
- Demonstrate competence in analysis of syntax (grammar transcription);
- Identify and differentiate component levels of oral and written language such as form (phonology/orthography), meaning (semantics), and structure (morphology/syntax);
- Identify and differentiate semantics and pragmatics – lexical/sense relations; language in context; conversational implicature including Grices’s Maxims; and Speech Act theory;
- Explain the reasons why there is more to communication than simply describing component parts (e.g., pragmatics);

\(^1\) Must be individually and formally assessed
• Describe and compare theories and models of key linguistic processes such as spoken word recognition and semantic representation;
• Understand Language acquisition – competing theories of language acquisition; stages of language development in children;
• Explain psycholinguistics including language processing, and language and computers;
• Explain sociolinguistics – interactional sociolinguistics; language and social dimensions; language policy and planning; language change;
• Interpret and apply scientific information on linguistics necessary for speech pathology (e.g., regarding bilingualism).

**Phonetics – knowledge and practical skills required**

Competence in real-time broad (phonemic) transcription of adult and child English (formally assessed in-class) using the International Phonetics Alphabet. Using appropriate diacritics for clinical evaluation. In addition, study of the theoretical concepts of allophones, distinctive feature analysis, diacritics, stress, accent, suprasegmental aspects of speech, and the acoustic features of vowels and consonants.

Important: You will be offered a challenge exam in broad phonemic transcription in the early stages of the course, and additional revision will be provided to support students until they are able to meet the required level of skill.

It is assumed that students will be able to:
• Transcribe phonemically English Phonemes including, consonants, stressed vowels, unstressed vowels and diphthongs;
• Apply morpho-phonemic and phonotactics rules;
• Describe, apply, interpret and integrate scientific information on phonetics and phonology to speech pathology contexts;
• Explain the importance of reliability measures and be able to evaluate their own phonemic transcription reliability;
• Map vowels and diphthongs onto an acoustic-articulatory map from knowledge of the values of the first two formants. Interpret this information when provided with a complete map;
• Compare the vowels of various dialects of English (including Australian English) by using an acoustic-articulatory map and interpreting the map in acoustic and articulatory terms;
• Choose an appropriate sampling rate when digitally recording speech signals for analysis in clinical and research settings;
• Describe the suprasegmentals of speech
• Understand acoustic analysis of vowels, and formants
• Identify individual phonemes in a spectrograph of connected speech and relate the findings of spectrographic analysis to articulatory function using the Source-Filter model of speech production.

**Functional Anatomy of the Speech System**

Study of functional anatomy of the head and neck including those necessary for speech, swallowing, respiration and hearing. It is essential that the following areas of the human body have been studied - bones of the head, auditory system, neck, and torso as well as the joints, muscles and nerves of the brain, head, face, larynx, pharynx, and respiratory systems.

It is assumed that students will be able to:
• Identify the bones of the head, neck and torso and describe the normal and abnormal development of the skull, ears, face, lips, tongue, palate and nose;
• Describe the structure of the three types of joints, their movement and factors influencing mobility and stability at joints including the structure and movements of the temporomandibular joint and its role in speech and swallowing;
• Identify and describe the actions and functions of the muscles of facial expression, oral cavity, palates, and pharynx and understand their role in speech and swallowing;
• Identify and describe the actions and functions of the muscles of the larynx and understand their role in production of voice and speech and in swallowing;
• Describe the physiology of the respiratory and laryngeal systems, and understand their role in speech and swallowing.

**Functional Neurology of the Speech System**

Study of the functional anatomy and physiology of neural structures as well as fundamental concepts of nervous system function necessary for speech, language, hearing, and swallowing.

It is assumed that students will be able to:
• Identify and describe the anatomy and structures of the brain and spinal cord;
• Identify and describe the cranial nerves which supply the articulatory and phonatory structures;
• Describe the anatomy and physiology of the auditory system and explaining the pathway by which sound information is processed;
• Explain the basic concepts of sensory and motor control of the speech system.
## Examples of units that will provide assumed knowledge appropriate for the Master of Speech Language Pathology

### International Linguistic and Phonetic units

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<thead>
<tr>
<th>UNIVERSITY</th>
<th>UNITS OF STUDY</th>
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<tbody>
<tr>
<td>Alberta, The University of, Canada</td>
<td>LING101 Introduction to Linguistic Analysis and LING102 Introduction to Linguistics II and LING205 Phonetics</td>
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<tr>
<td>Calgary, University, Canada</td>
<td>LING201 Introduction to Linguistics I</td>
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<tr>
<td>British Columbia, The University of, Canada</td>
<td>LING201-921 Linguistics Theory and Analysis I and LING201 Linguistics Theory and Analysis II and LING313 Introduction to Linguistic Phonetics and Speech Science</td>
</tr>
<tr>
<td>Brock University, Ontario, Canada</td>
<td>LING1FP4 Introduction to General Linguistics and LING2P50 Phonetics</td>
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<tr>
<td>New York University</td>
<td>CSCD-UE 1045 Science of Language and CSCD-UE.0061.01 Phonetics and Phonemics and LING-UA11 Sound and Language</td>
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<tr>
<td>McGill University, Canada</td>
<td>LING201 Introduction to Linguistics and LING330 Phonetics and LING530 Acoustic Phonetics</td>
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<tr>
<td>Ottawa University, Canada</td>
<td>LN1310C Introduction to Linguistics I and LN1320 Introduction to Linguistics II</td>
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<tr>
<td>Queens, Canada</td>
<td>LING100A Introduction to Linguistics and LING310 Phonetics</td>
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<td>St Mary’s University, Canada</td>
<td>LING 1200 Introduction to Linguistics and LING 2309 Phonetics</td>
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<tr>
<td>Simon Fraser University, Canada</td>
<td>LING220 Introduction to Linguistics and LING221 Introduction to Phonetics and Phonology</td>
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<tr>
<td>Toronto University, Ontario, Canada</td>
<td>LINA01H3Y General Linguistics 1 and LIN228H1F Phonetics</td>
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<tr>
<td>Chinese University of Hong Kong</td>
<td>LING 1902 Invitation to Linguistics and LING 2003 Phonetics I</td>
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<tr>
<td>Hong Kong, Polytechnic University</td>
<td>CBS1900 Introduction to Language and ENGL2004 Analysis of English Pronunciation and ENGL2005 English Lexis and Semantics and ENGL2006 Analysis of English Grammar and ENGL3003 English Discourse in the Professions and ENGL3005 Languages in Contemporary Societies and ENGL4017 Critical Language and Cultural Studies</td>
</tr>
<tr>
<td>Hong Kong, The University of</td>
<td>LING1001 Introduction to Linguistics and LING2003 Semantics: Meaning and Grammar and LING2004 Phonetics: Describing Sounds and LING2034 Psycholinguistics</td>
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<tr>
<td>Nanyang Technological University, Singapore</td>
<td>HG101/1001 Fundamentals of Linguistics (A) and HG102/1002 Fundamentals of Linguistics (B) and HG2002 Semantics and Pragmatics and HG203/2003 Phonetics and Phonology</td>
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<tr>
<td>National University, Singapore</td>
<td>(EL1101E The Nature of Language and EL2202 The Sound System of English (for transcription)) OR (EL1101E The Nature of Language and EL3202 Phonetics and Phonology)</td>
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<tr>
<td>Arizona University, USA</td>
<td>SLHS 340 Language Science and SLHS 367 Phonetics</td>
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<tr>
<td>Biola University, Los Angeles, USA</td>
<td>CODS 331 Speech-Language Development &amp; Disorders and CODS 321 Clinical Phonetics and Phonology</td>
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<tr>
<td>Colorado, University of</td>
<td>LING 2000 Introduction to Linguistics and LING 3100 Language Sound Structures</td>
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LaSalle University, USA
SLH 100 Introduction to Language & Communication and
SLH 200 Phonetics and
SLH 203 Language Development

Pittsburgh University, USA
CSD 1020 Nature of
Language and CSD 1022
Transcription Phonetics

Prairie State College, Illinois
SPA-101 Introduction to SLPA
and SPA-161 SLPA Intro to
Phonetics

Rhode Island University, USA
CMD 493 Cultural and Linguistics Diversity in CSD
and CMD 273 Phonetics

San Diego State University, USA
LING 101 Introduction to
Language and SLHS 320
Phonetics

State University of NY at Stony Brook, USA
LIN 100 Human
Language and LIN
201 Phonetics

Washington, USA
LING200 Introduction to Linguistic Thought and
LING450 Introduction to Phonetics and Phonology

Pontificia Universidad Javeriana, Bogota Columbia
006126 Linguistic Structure

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**Local Linguistic and Phonetics units**

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<th>UNIVERSITY</th>
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<tr>
<td>Australian Catholic University</td>
<td>SPHY 103 Linguistics and Phonetics for SP</td>
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| Australian National University | LING1001 Introduction to the Study of Language
LING2010 Phonetics: Sounds of the World’s Languages |
| Charles Sturt University | SPH101 Speech, Language and Culture |
| James Cook University | SL1002 Introduction to Linguistics and
Phonetics SL1004 Linguistics and
Phonetics 2 |
| Macquarie University | **Option 1**
(LING110 or LING111) Language: its Structure and Use
AND
(LING217 Phonetics and Phonology (Transcription) OR LING210 Phonetics and Phonology (Transcription) OR LING398 Phonetics: Transcription and Theory)

**Option 2**
LING199 Introduction to Linguistics
AND
(LING217 Phonetics and Phonology OR LING210 Phonetics and Phonology (Transcription) OR LING398 Phonetics: Transcription and Theory)

Melbourne, The University of |
LING30001 Exploring Linguistics Diversity (or all the individual units – phonology, syntax, morphology, semantics, discourse)
AND
LING20005 Phonetics

Monash University |
ATS1338 The Language Game: Why we talk the way we do
AND
(ATS1339 Describing and Analyzing Language and Communication OR ATS3669 Phonetics and Phonology)

Newcastle |
LING1111 Introduction to Linguistics 1 AND
LING3008 Introduction to Phonology and Morphology

New South Wales, The University of |
ARTS 1690 Structure of
Language AND ARTS 1691
The Use of Language

New South Wales, The University of |
LING 5026 Introduction to Linguistic
Analysis AND LING 5000 Special
Project in Applied Linguistics

Queensland, The University of |
LING1000 Introduction to Linguistics: Structure and Meaning of Words and Sentences AND
LING1005 Introduction to Linguistics: The Sound Pattern of Language
Sydney, The University of
LNGS1001 Structure of Language
AND
(LNGS2601 Phonetics and Phonology OR (LNGS2620 Phonetics AND LNGS2621 Phonology))

Western Australia, The University of
LING1001 Language and Communication
AND
LING2002 Phonetics and Phonology

Western Sydney University
10948 Structure of Language
AND
102042 The Sound of Language

Local Anatomy and Neurology units

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<tr>
<th>UNIVERSITY</th>
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<tbody>
<tr>
<td>Macquarie University</td>
<td>SPM 308 Speech Physiology</td>
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<tr>
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<td>HLTH213 Anatomy of the Head, Neck, and Trunk</td>
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<td>HLTH214 Neuroanatomy</td>
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<td></td>
<td>BIOL257 Neurophysiology</td>
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<tr>
<td>University of Sydney</td>
<td>BIOS1165 Hearing Science and Audiology</td>
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<tr>
<td></td>
<td>BIOS1166 Neuroscience I: Communication Disorders</td>
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