# The Chinese University of Hong Kong Department of Linguistics and Modern Languages Second Term, 2022-23

Course Title: LING6970 Special Topics in Linguistics—Language Disorders in Speakers of Chinese

Description: The first half of the course focuses on introducing students to fundamental concepts of language disorders in pediatric and adult populations, including primary and secondary language and speech disorders. In the second half of the course, topics related specifically to disorders in speakers of Chinese will be discussed.

Content, highlighting fundamental concepts

Topic	Contents/fundamental concepts
Speech disorders	Articulation & phonological disorders in children and adults
Language disorders in children	Primary language impairment, literacy problem, and genetic syndromes
Neurogenic disorders in adults	Aphasia and cognitive-based communication disorders
Hearing impairment and language	Deafness, cochlear implant, and aging
Disorders in multi-lingual speakers	Characteristics, assessment, and treatment
Disorders in Chinese speakers	Speech and grammatical features in Chinese languages that are especially vulnerable to impairment
Research informed by language disorders in Chinese speakers	How data from Chinese speakers with language disorders can inform theories of language and/or can be translated to clinical solutions

### **Learning outcomes**

#### **Learning outcomes:**

At the end of the course, students will be able to

- Describe the fundamentals of language and communication, and basic characteristics of language disorders
- Explain the etiology of different language disorders
- Analyze patient signs and symptoms and attribute them to specific language disorder types
- Propose a research study related to language disorders in Chinese speakers

**Learning activities** 

Lecture	Interactive	Lab	Discussion of	Field-trip	Projects	Web-based	Other
	tutorial		case			teaching	
(hr)							
in /out class							
3			0.5		2		
M			M		M		

M: Mandatory activity in the course

O: Optional activity NA: Not applicable

#### Assessment scheme

Task nature	Description	Weight
Final Exam	Comprehensive assessment of the didactic information presented in the lectures.	25%
Advanced Topics Presentation	Presentation of a topic within the student's area of interest. (instructions uploaded separately)	20%
Final Research Proposal	Proposal of a research study. (instructions uploaded separately)	25%
Short Assignments	Short assignments to promote interactive learning in lectures.	15%
Case Studies	Audio, audio-video, and written cases for applying textbook knowledge in analyzing clinical cases. (3 total, 5% each)	15%

### **Learning resources for students**

#### Recommended textbooks:

Fogle, Paul T. (2019). Essentials of Communication Sciences & Disorders, 2nd Edition. Burlington, MA: Jones & Bartlett Learning.

Law, S-P., Weekes, B., Wong, A. M-Y (2008). *Language Disorders in Speakers of Chinese*. Multilingual Matters.

### Recommended readings by topics:

Speech disorders in childhood

- Zhu, H. (2006). The normal and disordered phonology of Putonghua (Modern Standard Chinese)-speaking children. In H. Zhu & B. Dodd (Eds.), Phonological development and disorders in children: A multilingual perspective (pp. 81–108). Buffalo, NY: Multilingual Matters.
- Hearnshaw, S., Baker, E., & Munro, N. (2019). Speech perception skills of children with speech sound disorders: A systematic review and meta-analysis. Journal of Speech, Language, and Hearing Research, 62(10), 3771-3789.
- Law, T., Packman, A., Lee, K. Y.-S., To, C. K. S., Tong, M. C.-F., & Onslow, M. (2018). Lexical tone and stuttering in Cantonese. Clinical Linguistics & Phonetics, 32, 285-297. doi: 10.1080/02699206.2017.1359851

#### Language disorders in children

[Autism Spectrum Disorders]

- Wang, L., Beaman, C., Jiang, C., Liu, F. (2021) Perception and production of statement-question intonation in autism spectrum disorder: a developmental investigation. Journal of Autism and Developmental Disorders ISSN: 0162-3257 | doi: https://dx.doi.org/10.1007/s10803-021-05220-4
- Obeid, R., Brooks, P. J., Powers, K. L., Gillespie-Lynch, K., & Lum, J. A. (2016). Statistical learning in specific language impairment and autism spectrum disorder: A meta-analysis. Frontiers in psychology, 7, 1245.
- Ellis Weismer, S., Kaushanskaya, M., Larson, C., Mathée, J., & Bolt, D. (2018). Executive function skills in school-age children with autism spectrum disorder: Association with language abilities. Journal of speech, language, and hearing research, 61(11), 2641-2658.
- Wood, J. J., Kendall, P. C., Wood, K. S., Kerns, C. M., Seltzer, M., Small, B. J., ... & Storch, E. A. (2020). Cognitive behavioral treatments for anxiety in children with autism spectrum disorder: a randomized clinical trial. Jama Psychiatry, 77(5), 474-483.

### [Specific Language Impairment]

• Leonard, L.B. (2014). Specific Language Impairment Across Languages. Child Development Perspectives 8, 1–5. doi:10.1111/cdep.12053

- Wong, A. M.-Y., Ho, C. S.-H., Au, T. K.-F., McBride, C. A., Ng, A. K.-H., Yip, L. P.-W., Lam, C. C.-C. &, (2017) Reading comprehension and its component skills in Chinese Children with SLI and/or Dyslexia. Reading and Writing: An Interdisciplinary Journal, 30, 337-361.
- Kan, P. F., Huang, S., Winicour, E., & Yang, J. (2020). Vocabulary growth: Dual language learners at risk for language impairment. American Journal of Speech-Language Pathology, 29(3), 1178-1195.
- Liu, P. D., McBride-Chang, C., Wong, A. M.-Y., Tardif, T., Stokes, S., Fletcher, P., & Shu, H. (2010) Early oral language markers of poor reading performance in Hong Kong Chinese children. Journal of Learning Disabilities, Special edition on advances in the early detection of reading risk, 43, 322-331.

# Neurogenic disorders in adults

## [Aphasia]

- Yiu, EML. (1992). Linguistic assessment of Chinese-speaking aphasics: Development of a Cantonese aphasia battery. Journal of Neurolinguistics.
- Suting, L. B., & Mozeiko, J. (2021). Analysis of Real-World Language Use in a Person With Wernicke's Aphasia. Perspectives of the ASHA Special Interest Groups, 6(3), 553-565.

### [Cognitive disorders]

- Bozeat, S., Lambon Ralph, M.A., Patterson, K., Garrard, P., Hodges, J.R., (2000). Non-verbal semantic impairment in semantic dementia. Neuropsychologia 38, 1207–1215.. doi:10.1016/s0028-3932(00)00034-8
- Castrén, E., Elgersma, Y., Maffei, L., & Hagerman, R. (2012). Treatment of neurodevelopmental disorders in adulthood. Journal of Neuroscience, 32(41), 14074-14079.
- Mendez, M. F. (2006). The accurate diagnosis of early-onset dementia. The International Journal of Psychiatry in Medicine, 36(4), 401-412.

#### Hearing impairment and language

- Moberly, A. C., & Reed, J. (2019). Making sense of sentences: top-down processing of speech by adult cochlear implant users. Journal of Speech, Language, and Hearing Research, 62(8), 2895-2905.
- Niparko, J. K., Tobey, E. A., Thal, D. J., Eisenberg, L. S., Wang, N. Y., Quittner, A. L., ... & CDaCI Investigative Team. (2010). Spoken language development in children following cochlear implantation. Jama, 303(15), 1498-1506.
- Geers, A. E., Nicholas, J. G., & Sedey, A. L. (2003). Language skills of children with early cochlear implantation. Ear and hearing, 24(1), 46S-58S.
- Ingvalson, E. M., & Wong, P. C. (2013). Training to improve language outcomes in cochlear implant recipients. Frontiers in psychology, 4, 263.

# Disorders in multi-lingual speakers

- Sheng, L., Peña, E. D., Bedore, L. M., Fiestas, C. E. (2012). Semantic deficits in Spanish-English bilingual children with language impairment. Journal of Speech, Language, and Hearing Research, 55, 1-15.
- Throdardottir, E. (2010). Towards evidence-based practice in language intervention for bilingual children. Journal of Communication Disorders, 43, 523-537.
- Faroqi-Shah, F., Frymark, T., Mullen, R., Wang, B. (2010). Effect of treatment for bilingual individuals with aphasia: A systematic review of the evidence. Journal of Neurolinguistics, 23, 319-341.
- Kiran, S., Roberts, P. M., (2010). Semantic feature analysis treatment in Spanish-English and French English bilingual aphasia. Aphasiology, 24, 231-261.
- Abutalebi, J. et. al. (2009). Bilingual aphasia and language control: A follow-up fMRI and intrinsic connectivity study. Brain & Language, 109, 141-156.

### Additional readings will be assigned.

#### Feedback for evaluation

Students are welcome to give comments and feedback by sending them in written form to the instructor's email address or talking to the instructor.

## **Course Schedule (Tentative)**

Class/ Week	Date (2023)	Topic/Learning Activity
Week 1	Jan 11	Language Disorders Fundamentals, Definitions & Psychometrics
Week 2	Jan 18	Basic Scientific Concepts, Proposing a Study
Week 3	Jan 25	CNY Holiday
Week 4	Feb 1	Child Speech Disorders Case 1
Week 5	Feb 8	Child Language Disorders Case 2
Week 6	Feb 15	Adult Language Disorders Case 3
Week 7	Feb 22	Adult Speech and Cognitive Disorders
Week 8	March 1	Hearing Impairment and Language
Week 9	March 8	Bilingual Disorders
Week 10	March 15	Child Speech Disorders in Chinese Speakers Adv Topics
Week 11	March 22	Child Language Disorders in Chinese Speakers Adv Topics
Week 12	March 29	Cog Neuro Society Meeting/Class Cancelled
Week 13	April 5	Tomb Sweeping Day
Week 14	April 12	Adult Speech and Language Disorders in Chinese Speakers Adv Topics
Week 15	April 19	Bilingual Disorders in Chinese Speakers Adv Topics
Week 16	April 24 (Mon) (Make-up Day)	Final Exam

### Instructor's contact information

Professor/Lecturer/Instructor:	
Name:	Patrick C. M. Wong
Office Location:	G03 KKB and 4/F HYS
Office Hours:	Wed 4-5:30pm (at HYS) or by appt
Telephone:	3943-7009
Email:	p.wong@cuhk.edu.hk
Teaching Venue:	KKB Ground Floor Conference Room (Room G14 of Leung Kau Kui Building)
Class/Tutorial Time:	Wed 9:30am-12:15pm
Website:	http://brain.cuhk.edu.hk/

### A facility for posting course announcements

All announcements of the course will be posted on blackboard. (https://blackboard.cuhk.edu.hk)

### Academic honesty and plagiarism

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at <a href="http://www.cuhk.edu.hk/policy/academichonesty/">http://www.cuhk.edu.hk/policy/academichonesty/</a>. With each assignment, students will be required to

submit a statement that they are aware of these policies, regulations, guidelines and procedures.

**Grade Descriptors** 

Grade	Overall Course
A	Demonstration of a thorough understanding of the linguistic and biological bases of all language disorders discussed, and a high degree of competency in translating this knowledge into making a diagnosis and developing a treatment plan for each disorder with virtually no weakness, including 1) the ability to analyze language samples to arrive at a diagnosis by integrating information about the etiology of the disorder, 2) the ability to describe comparative treatment strategies for each disorder and to provide a rationale for the chosen strategy based on the patient's disorder profile, and 3) the ability to discuss the social, emotional, and educational consequences of each disorder. Research proposal contains no major weakness.
A-	Demonstration of a thorough understanding of the linguistic and biological bases of all language disorders discussed, and a high degree of competency in translating this knowledge into making a diagnosis and developing a treatment plan for each disorder with minor weaknesses in no more than two disorders. Research proposal contains no major weakness.
В	Demonstration of a thorough understanding of the linguistic and biological bases of all language disorders discussed, and a degree of competency in translating this knowledge into making a diagnosis and developing a treatment plan for each disorder with major weaknesses in no more than two disorders. Research proposal contains no more than one major weakness.
С	Demonstration of an understanding of the linguistic and biological bases of all language disorders discussed, and a degree of competency in translating this knowledge into making a diagnosis and developing a treatment plan for each disorder with major weaknesses in several disorders. Research proposal contains more than two major weaknesses.
D	Demonstration of some understanding of the linguistic and biological bases of all language disorders discussed, and limited competency in applying this knowledge into making a diagnosis and developing a treatment plan for each disorder with major weaknesses across a spectrum of disorders. Research proposal contains numerous major weaknesses.
F	Demonstration of minimal understanding of language disorders, with very limited ability to apply basic knowledge into diagnostics and treatment. Research proposal contains numerous major weaknesses.