## UNIVERSITY OF PUERTO RICO MEDICAL SCIENCES CAMPUS SCHOOL OF HEALTH PROFESSIONS SPEECH-LANGUAGE PATHOLOGY

## **CURRICULUM**

COURSE	CREDITS	DESCRIPTION
HLAG 6300 – Basic Concepts in Linguistics, Psycholinguistics and psychoacoustics	3	Topics in basic Spanish grammar, semantics, morpho-syntax, phonology and pragmatics. Discussion on language use and auditory perception. Phonetic transcription in English and Spanish.
AUDI 6301 - Fundamentals of Audiology	3	Considerations about physical properties of sound, anatomy and physiology of the auditory system, common disorders of hearing and administration and interpretation of hearing tests.
HLAG 6303 - Anatomy of the Speech and Hearing mechanism	3	Study of the various structures and systems involved in speech and hearing and their function under normal and pathological conditions.
PHAL 6305 - Speech-Language Pathology: Evaluation and Diagnosis	3	Study of clinical procedures used in communication evaluations of patients with speech and language disorders. Basic information about instruments used in clinical data collection, interview techniques, test administration and referrals.
PHAL 6308 - Statistical Principles Applied to Research in Communicative Disorders	2	Research problems and hypotheses formulation. Methods for data collection and analysis with special reference to experimental techniques. Tests of significance correlation, and analysis of variance.
HLAG 6309 - Experimental Design in Speech, Language, and Hearing Sciences	2	Review of issues and orientation about types of experimental designs and investigation methods used in research on speech-language pathology and audiology.
HLAG 6317 - Clinical Practicum Seminar	1	Weekly meetings for the discussion of clinical cases and topics related to the profession.
HLAG 6325 - Communication Development of the Normal Child	3	Considerations on the process of natural communicative development of the Spanish speaking pre-school child in terms of sequence, content, form and use.

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		Procedures and techniques for language measurement of this child are also covered.
HLAG 6333 - Language Stimulation of the Deaf Child	3	Evaluation and management of language in children with hearing impairments. Consideration of theories and problems encountered in stimulating communication skills in deaf children. Techniques of auditory training for speech development are also included.
PHAL 6509 - Speech and Language Problems in bilingual children, children with environmental deprivation, and children with mental retardation	2	(a) Discussion about communicative difficulties of some bilingual children and children who come from areas of environmental deprivation. Differences vs. deficit approaches are covered; also, clinical modifications required of the Speech-Language Pathologist in order to provide evaluation and therapy to these children. (b) Study of language and speech patterns of children various degrees of mental retardation. Clinical techniques developed for speech and language stimulation of this population are covered also.
PHAL 6512 - Neurogenic Communicative Disorders in Adults	3	Study of the nature and causes of communication problems due to neurological danger in adults. Included are discussions on aphasia, apraxia of speech, the dysarthrias, language of confusion and generalized intellectual impairment pertaining to evaluation, diagnosis, and treatment.
PHAL 6514 - Cleft Palate	2	Study of the types and degrees of palatal and facial malformations related to congenital and acquired clefts and their possible etiologies. Consideration of problems associated with clefts and management techniques of related communicative disorders.
PHAL 6515 – Stuttering	3	Study of the characteristics of stuttering, normal disfluencies, and incidence. Theories about etiology are compared. Evaluation and treatment techniques are discussed.
PHAL 6518 - Disorders of Voice	2	Study of the vocal mechanism and voice disorders. Evaluation and treatment techniques for the correction of voice disorders in children and adults are

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		considered; also esophageal speech for the laryngectomized. Instrumental evaluation is discussed.
PHAL 6519 - Articulation Problems and Phonology	3	Study of the articulation mechanism and the disorders of phonological system development, including distinctive features of the Spanish and English languages. Discussion of materials and methods for the diagnosis and treatment of articulation disorders in children.
AUDI 6520 - Communication Rehabilitation of the Hard- of-Hearing Adult	2	Study of principles and techniques of language development, auditory training, lip reading and speech conservation used for the communication management of adults with hearing loss.
PHAL 6521 – Speech and Language Disorders in Children with Autism and Children with Schizophrenia	1	Discussion about the characteristics of infantile autism and schizophrenia in children, including the communication abilities of both groups. Current language difficulties in these children are covered also.
PHAL 6522 – Diagnosis and Habilitation of the Child with Neurological Problems	2	Study of the etiology, incidence, diagnosis and habilitation of speech and language disorders secondary to brain damage in children. Materials and methods for evaluation and treatment of these difficulties are discussed.
PHAL 6524 - Dyslexia and Dysgraphia in the Child	1	Study of different etiologies and symptoms of visual language impairment. Also diagnosis and management of patients with reading and writing disorders.
HLAG 6529 - Organization and Administration of Service Programs in Communication Disorders	2	Topics on general management (planning, organization, direction, and control) and systems design are discussed. Also, standards of services in speech, language, and hearing in clinics, schools and other settings are presented and discussed.
HLAG 6533 - Language Disorders of Children	3	Study of theories and recent findings of investigation about etiology, symptoms, diagnosis, and treatment of children with language disorders.
HLAG 6600 - Thesis	6	Orientation and guide in thesis research and writing.
PHAL 6542 - Introduction to Assistive Technology in	3	Elective Course: This course has been designed to develop in Speech-Language Pathologists the necessary skills and

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Augmentative and Alternative Communication		knowledge so that they can use technology as the instrument for Augmentative and Alternative Communication in their clinical practicum. Chronological development of AAC field will be studied. The course includes topics like: the role of AAC in the lives of individuals, with or without expressive communication disorders; the requisites for an effective communication system; the design of communication systems; the evaluation process for the selection of an appropriate assistive; the selection technique; and the symbols and structures.
PHAL 6525 - Dysphagia	3	Elective Course: Introduction to the study of dysphagia in adults. Normal and deviated aspects of deglutition will be studied; as well as, illustration of evaluation and diagnostic techniques. The function of other professionals in the management of this condition will be discussed. Interdisciplinary collaboration in the offering of services is stressed.
HLAG 6700 - Current Topics: Intervention Strategies in SLP	1	Elective course: This course will present the components of the treatment plan, behavior modification, data collection and documentation. The students will learn to plan intervention with measurable and achievable goals that meet the client's needs. They will also learn to focus on intervention approaches to use with children, adolescents and adults. Topics covered will include: time management in therapy sessions, materials selection, therapeutic techniques, data collection, use of technology for therapy, family and significant others' involvement in the intervention process, and documentation requirements.
PHAL 6310 - Clinical Practicum		Clinical practice in the diagnosis and treatment of speech and language disorders in children and/or adult. The students also develop competence in clinical management techniques, under supervision and direct clinical instruction.  The students complete the first 75 hours of direct client contact and 25 hours of clinical observations.

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PHAL 6311 - Clinical Practicum		Practice in the diagnosis and treatment of speech and language disorders in children and/or adult. The student also develops the competence in clinical management techniques, under the supervision and direct clinical instruction. The student completes 125 hours of direct client contact.
HLAG 6316 Professional Practicum		Clinical practicum in the evaluation/diagnosis and treatment of speech and language disorders in children and/or adult. The course is designed to develop competence in clinical management techniques, under supervision and direct clinical instruction. The student completes 200 hours of direct client contact.
HLAG 6305 Acoustics for the Speech and Hearing Sciences	3	Sound as a physical and perceptual phenomenon is studied. Relevant aspects of the disciplines of Speech-Language Pathology and Audiology define the fundamental focus and content of this course. The principal topics discussed are: Behavior of the acoustic wave in the air; Description of intensive aspects of sound, and the decibels (dB) scale; The theory of the signal and the spectral analysis; Psychoacoustic methods; Characteristics of human hearing, including capacity to detect, discriminate and locate the sound signal. Laboratory demonstrations are an integral part of the course, as well as, illustrations in class of acoustic phenomena.