



COURSE SPECIFICATION

Phoniatric Disorders

Faculty of Medicine-Mansoura University

(A) Administrative information

(1) Programme offering the course.	Postgraduate Doctorate degree of Phoniatrics/ PHON 600			
(2) Department offering the programme.	Otorhinolaryngology Department			
(3) Department responsible for teaching the course.	Ot <mark>orh</mark> inolaryngology Department – Phoniatric unit			
(4) Part of the programme.	second part			
(5) Date of approval by the Department's council	15/5/2016			
(6) Date of last approval of programme specification by Faculty council	9/8/2016			
(7) Course title:	Phoniatric disorders			
(8) Course code:	PHON 624 PD. - PHON 624 PDTa - PHON 624 PDTb - PHON 624 PDTc - PHON 624 PDTd			
(9) Total teaching hours:	- Language disorders subcourse: 75hs/15wks (lectures)+45hs/15 wks(clinical) - Speech disorders subcourse: 90hs/15wks (lectures)+45 hs/15 wks(clinical) - Voice disorders and phonosurgery subcourse: 75 hs/15wks (lectures)+45 hs/15 wks(clinical) - Swallowing disorders subcourse: 75hs/15wks (lectures)+45hs/15 wks(clinical)			

(B) Professional information

(1) Course Aims.

The broad aims of the course are as follows:

The course is designed to provide the candidate with the basic and advanced knowledge and skills necessary to be competent as to the whole of prophylaxis, diagnostics, therapeutics, rehabilitation, medical report, teaching and research, with reference to the diseases and disorders of language, speech, voice and swallowing disorders. The course will ensure that the candidate will be able to work with clients of all ages, including children and adults.

(2) Intended Learning Outcomes (ILOs):

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

- **A4.** Understand the psychological and behavioral aspects of verbal communication.
- **A6.** Acquire advanced knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the voice disorders that include:
 - A6a. Congenital voice disorders.
 - A6b. Developmental voice disorders.
 - A6c. Non-organic (functional) voice disorders with and without secondary organic lesions in the larynx, including occupational dysphonia and also singers' voice.
 - A6d. Dysphonia caused by hormones.
 - A6e. Dysphonia as a result of organic alterations in the larynx.
 - A6f. Voice disorders due to neurological and psychiatric diseases, including vocal fold paralysis.
 - A6g. Voice disorders after operation or trauma of the larynx.
- A7. Acquire advanced knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the speech disorders that include:
 - A7a. Organic and functional articulation disorders.
 - A7b. Nasality, including cleft palate.
 - A7c. Dysfluency (stuttering and cluttering)
 - A7d. Dysartheria due to neurological (central, peripheral) and muscular diseases.

A8. Acquire advanced knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the language disorders that include:

A8a. Delayed language development in children due to (but not limited to) hearing disorders (central and peripheral), mental retardation, brain damaged motor handicapped child (cerebral palsy), autism spectral disorder(ASD), attention deficit hyperactive disorders (ADHD), Specific language impairment (SLP)...

A8b. Learning disability due to disorders of reading, writing and calculating (dyslexia, dysgraphia). A8c. Dysphasia, aphasia.

- **A9.** Acquire advanced knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the swallowing disorders (Dysphagias) due to problems in the oral, and/or pharyngeal stages of swallowing (structural lesions, neurological disorders).
- **A10.** Acquire teaching abilities relevant to disorders of voice, speech, language and swallowing in order to participate in planning and implantation of that field.
- A12. Know the Legal and medicolegal aspects in practise of phoniatric disorders as well as medical ethics.

B- Intellectual skills:

- **B1.** Outlines the therapeutic measures in the field of diseases of voice, speech, language and swallowing and applies them surgically, pharmacologically and behaviorally in order to be able to draw and perform the strategy of the therapy in the field efficiently.
- **B2.** Collects complete, clear and organized information about the patient's ailments in order to be able to analyze it and formulate a preliminary idea concerning the etiological diagnosis of ailments.
- **B3**. Analyses the speech (verbal) message of the patient concerning voice, phonology, semantic, syntax, and morphology in order to be able to describe precisely the type and degree of pathological aspects of communication.
- **B4.** Analyses and relates the results of all different items of the battery of investigations in order to reach at an etiological diagnosis and possible differential diagnosis utilizing his/her theoretical background that draws charts for different groups of aliments in the field of phoniatrics.
- **B5.** Outlines the role of pharmacological therapeutic agents in treatment of diseases of voice, speech, language and swallowing in order to be able to describe them when needed.
- **B6.** Recognizes the methods of voice therapy in order to criticize the efficiency and pitfalls of each.
- **B7.** Grasps the principles of behavior therapy in order to introduce efficiently these measures in the therapeutic programs given to patients.

- **B8.** Grasps the principles of general language stimulation in order to be able to give efficient family guidance programs to help families that have children with delayed language development to participate efficiently in the therapeutic program.
- **B9.** Grasps the principles of language rehabilitation of dysphasic patients in order to include it efficiently in the comprehensive rehabilitation program for these patients, including family guidance.
- **B10.** Grasps the principles of language rehabilitation for the hearing impaired patient in order to include it efficiently in the comprehensive program for rehabilitation of the hearing handicapped.
- **B11.** Identifies the role of prosthetic devices and aids in the therapeutic program for diseases of voice, speech, language and swallowing in order to be able to use it efficiently when indicated.

C- Professional/practical skills:

- C1. Examines patients with disorders of voice, speech, language and swallowing clinically and instrumentally and performs related formal tests on those patients in order to reach detailed etiological diagnosis and suggests prognosis.
- **C2**. Examines the ear, nose, pharynx and larynx as well as the nervous system efficiently in order to detect organic changes and evaluate its significance and in order to associate between these signs and the symtomatology collected previously.
- C3. Examines the larynx by means of stroboscope in order to study vocal fold's vibration during phonation and to detect the pathological picture of these vibrations and its significance.
- C4. Performs the available standardized psychological tests in order to draw a diagnostic profile for the various perceptual, affective, social, cognitive aptitudes as well as the performance abilities of the patients.
- **C5.** Carries out the various measurements and investigations using the available instrumental diagnostic procedures in order to support the preliminary diagnosis objectively.
- **C6.** Practices micro-laryngoscopy in order to be able to perform efficiently the necessary micro laryngeal surgical procedures on the vocal folds and the larynx in general.
- C7. Practices rehabilitation methods for speakers' and singers' voice.
- **C8.** Practices rehabilitation methods for nasality.
- **C9**. Practices rehabilitation of the laryngectomized patients.
- C10. Practices habilitation methods in delayed language development.
- C11. Practices rehabilitation methods for the correction of articulation errors.
- C12. Practices rehabilitation methods for learning disabilities.

- C13. Practices rehabilitation methods for stutterers and clutterers.
- C14. Practices rehabilitation methods in dysphasia and aphasia.
- C15. Practices rehabilitation methods in dysartherias.
- C16. Practices rehabilitation methods in oro-pharyngeal dysphagias.
- C17. Practices habilitation for hard of hearing children, including auditory training and habilitation of cochlear implantee.

D- Communication & Transferable skills.

- **D1.** Communicates effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds.
- **D2**. Cooperates with disciplines related to disorders of voice, speech, language and swallowing in order to participate in teamwork necessary for the proper management of those patients.
- **D3.** Conveys his/her ideas to specialists in other disciplines in order to be able to function effectively in a group.
- **D4.** Identifies the capacities and limitations of the other medical specialities participating with him/her in the clinical teams in order to be able to put effectively an integrated, realistic therapeutic program.
- **D5.** Practices the activities of group interaction in order to be able participate efficiently in the activities of the clinical teams.
- **D7**. On the basis of the knowledge, competence, and skill he has acquired during his training, a phoniatrician must also be prepared to fulfill the following important tasks:
 - D7a. Medical report on vocational unfitness and disability.
 - D7b. Medical care for voice professions.
 - D7c. Collaboration in early detection of laryngeal malignancies.
 - D7d. Organization and guidance of phoniatric institutes.
 - D7e. Education of physicians and special needs professions.
 - D7f. Conditions to be fulfilled with respect to training centers and supervisors.
 - D7g. Coordinate the rehabilitation programs (physical therapy, occupational therapy, cognitive therapy) for multi-handicapped children.

(3) Course content:

				Total
Subjects	Lectures /seminars	Clinical/Lab	Field	lectures
		-		Hours
(I) Language Disorders subcourse (PHON		<u> </u>	<u> </u>	
524PDTa):				
(A) Delayed language development in children.	1×3 lectures			5 hrs
(1) Definitions, aetiology, clinical pictures and classification: - hearing disorders (central and peripheral) mental retardation - brain damaged motor handicapped child (cerebral palsy) - Autism spectral disorders (ASD) Attention deficit hyperactive disorders (ADHD). Specifical language impairment (SLP)	1x2 seminars			
-Specific language impairment (SLP). (2) Assessment protocols for delayed language	3×2ectures	5 hs/15 wks		6hrs
development in children. (3) Intervention programs for delayed language development in children (counseling for families and training programs).	3× 3lectures	10 hs/15 wks		9hrs
(B)Dysphasia and Aphasia.	2x2 lectures			6 hrs
(1) Classifications, language organization, symptomatology, spontaneous recovery, agnosia.	1x2 seminars			
(2) Assessment protocols for dysphasia and aphasia.	3×3 lectures	5 hs/15 wks		9hrs
(3) Intervention programs for dysphasia and aphasia.	2×5 lectures	10 hs/15 wks		10 hrs
(C) Learning disability.	2x5 hours			10hrs
(1) Disorders of reading, writing and calculating (dyslexia, dysgraphia , dyscalculia): definitions, etiology, features.				
(2) Assessment protocols for learning disabilities.	2×5 lectures	6 hs/15 wks		10 hrs
(3) Intervention programs for learning disabilities.	2×5 lectures	9 hs/15 wks		10 hrs
(II) Speech Disorders subcourse (PHON		I		
524PDTb):				
(A) Articulation disorders (dyslalias):				
(1) Definitions, etiology, types, factors affecting severity and recovery, malocclusion problems.	2×2 lectures			4 hrs
(2) Intervention programs for articulation errors.	3×3 lectures	3 hs/15 wks		9 hrs
(B) Resonance disorders:	2×3 lectures			
(1) Types, velopharyngeal incompetence etiology, problems associated with VPI, epidemiology.	1x3 seminars			9 hrs

(2) Assessment protocols for velopharyngeal incompetence.	3×3 lectures	7 hs/15 wks	9 hrs
(3) Intervention programs for hypernasality.	3×3lectures	7 hs/15 wks	9 hrs
(C) Dysfluency disorders (stuttering and			
cluttering).			
(1) Definitions, theories, development,			
symptomatology, severity, prognosis.	2×2 lectures		4 hrs
(2) Assessment protocols for stuttering.	3×4 lectures	7 hs/15 wks	12 hrs
(3) Treatment strategies for stuttering in children and	2×3 lectures	7 hs/15 wks	9 hrs
adults.	1x3 seminars		
(D) Dysartherias:			
(1) Classifications, types, characteristics feature.	2×3 lectures		9 hrs
Apraxia of speech and oral apraxia.	1x3 seminars		
(2) Assessment protocols for dysartheria, apraxia of	2×4 lectures	7 hs/15 wks	8 hrs
speech and oral apraxia.	2×110010100	7 110/ 10 WKB	Oins
(3) Intervention programs for dysartheria, apraxia of speech and oral apraxia.	2×4lectures	7 hs/15 wks	8 hrs
(III) Voice disorders and phonosurgery			l
subcourse (PHON 524PDTc).			
(1) Physio-structural aspects, classification: organic	2×10 lectures		28 hrs
causes (congenital anomalies including sulcus glottideus			20 1113
and acquired causes including dysplasia	1x8 seminars		
endocrinopathies, vocal fold immobility, malignant			
neoplasms and spasmodic dysphonia.), MAP lesions and non-organic (functional) voice disorders, psychogenic			
dysphonia and aphonia.			
(2) Assessment protocols for evaluating a case of voice	2×11 lectures	20 hs/15 wks	22hrs
disorder.			
(3)Intervention programs for voice disorders:	2×10lectures	25 hs/15 wks	25hrs
- Voice therapy techniques (holistic and specific).	1x5 seminars		
Pharmacological therapy including Botox injection.Phonsosurgery for optimum voice outcome			
- Phonsosurgery for optimum voice outcome (Extirpation endolaryngeal microsurgery, vocal			
fold augmentation and intracordal injections and			
TEP voice prosthesis)			
-Rehabilitation of the laryngectomee			
(IV) Swallowing Disorders suncourse (PHON			
524PDTd).			
(A) oro-pharyngeal dysphagia in children:			
(1) physiological breakdown of feeding and deglutition,			
epidemiology, causes and abnormal feeding behaviors,	3×3lectures		9hrs
clinical subtypes of feeding and swallowing disorders.			

- Assessment of feeding and swallowing problems in	2×9 lectures	10 hs/15 wks	18 hrs
children (bed side and instrumental assessment).		,	
- Management of feeding and swallowing problems in	2×9 lectures	10 hs/15 wks	18 hrs
children including management of drooling.	2×3 lectures	10 HS/15 WKS	10 1113
(B) oro-pharyngeal dysphagia in adults:			
(1) Physiological breakdown of deglutition,			
epidemiology, causes, associated symptoms and signs.	2×5 lectures		10hrs
- Assessment of oro-pharyngeal dysphagia in adults (bed	2×5 lectures	10 hs/15 wks	10 hrs
side and instrumental assessment).			
- Management of oro-pharyngeal dysphagia in adults.	2×5 lectures	15hs/15 wks	10 hrs
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	315 hrs lectures,	180 clinical	315 hrs/
m.c.1	seminars /	hrs / 45 wks	45 wks
Total	,	IIIO / IO WKO	10 WR5
	45wks		

(4) Teaching methods.

- 4.1. Lectures
- 4.2. Power point presentation.
- 4.3 case presentation.
- 4.4. Seminar one hour duration done every week about the recent advances in this field (review of literature, journal club ...)
- (5) Assessment methods:
- 5.1. Written exam for assessment of A4, 6-10, B1-11, D1-5,7(after 42 months from the date of registration to the degree).
- 5.2. Oral/clinical exam for assessment of C1-17
- 5.3. MCQ continous assessment at the end of each semester.
- (6) Percentage of each assessment to the total mark:
 - 6.1. Written exam. 300 marks (including 60 marks MCQ).
 - 6.2 Oral exam. 100 marks.
 - 6.3 Clinical exam: 100 marks

(7) References of the course.

- 7.1.Andrews, M (1995): Manual of voice treatment, pediatrics through geriatrics. Singular Publ. Group, Inc
- **7.2.** *Barkley R.A.* (1998): Attention Deficit Hyperactivity Disorder: a Handbook for diagnosis and treatment. In: Barkley (Ed.). Second edition. New York: The Guilford Press.
- 7.3. Darley F.L., Aronson A.E., Brown J.R. (1975): Motor speech disorders. Philadelphia. W.B. Saunders.
- 7.5. Justice, L. (2006): Communication sciences and disorders: an introduction. L. Justice (1st Ed.). New Jersey: Prentice Hall.

- **7.6.** *Kotby*, *M.N.* (1980): Diagnosis and management of communicatively handicapped child. Ain Shams Medical Journal; 31: 303-317.
- 7.7. Kotby, M.N. (1995): The accent method of voice therapy. San Diego, CA., Singular Publisher Group.
- 7.8. Kummer, A (2008): Cleft palate and craniofacial anomalies: effects on speech and resonance. Thomas, Delmar Learning.
- 7.9. Lerner, J. (2000): Learning disabilities: Theories, diagnosis, and teaching strategies (8th ed.). Boston: Houghton Mifflin. 7.10. Logemann, J (1998): Evaluation and treatment of swallowing disorders.2nd Ed., Austin, Tx, ProEd. Publisher.
- 7.11. Lovaas O.I., Ackerman A., Alexander D., Firestone P., Porkins M., Young D.B., Carr E.G., Newsom C. (1981): Teaching Developmentally Disabled Children: The ME Book.. Pro Ed, Inc. USA.
- **7.12.** *Owens R.* (1999): Language disorders: A functional approach to assessment and intervention (3rd edition). Needham Heights, MA: Allyn and Bacon.
- **7.131.** *Stemple, J and Fry, L (2010):* Voice therapy: Clinical case studies, 3rd Ed., Plural Publisher, Inc.
- **7.14.** Supple M. (2000): Dyslexia: Oral and Written Language Disorder. Folia Phoniatr Logop; 52: 7–13
- 7.15. Swigert, N (1998): The source of pediatric dysphagia. LinguiSystems, Inc.
- 7.16. Van Riper C. (1970): Stuttering and cluttering: The differential diagnosis. Folia Phoniatr Logop; 22(4): 347-53.
- (8) Facilities and resources mandatory for course completion.

 Lecture halls and data show.

Course coordinator. Prof. Dr. Tamer Samir Abou-Elsaad