



COURSE SPECIFICATION

Phoniatic Disorders

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course.	Postgraduate Master degree of Phoniatrics/ PHON 500
(2) Department offering the programme.	Otorhinolaryngology Department
(3) Department responsible for teaching the course.	Otorhinolaryngology Department – Phoniatic 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.	Phoniatic disorders
(8) Course code.	PHON 524 PD. - PHON 524 PDTa - PHON 524 PDTb - PHON 524 PDTc - PHON 524 PDTd
(9) Total teaching hours.	- Language disorders subcourse . 30 hs/15wks (lectures)+45 hs/15 wks(clinical) - Speech disorders subcourse. 30 hs/15wks (lectures)+45 hs/15 wks(clinical) - Voice disorders and phonosurgery subcourse. 30 hs/15wks (lectures)+15 hs/15 wks(clinical) - Swallowing disorders subcourse. 15hs/15wks (lectures)+ 15 hs/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 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

A1. Enlarge the basic medical knowledge and made more thorough primarily by the study in detail of the anatomy, physiology and pathological physiology of the functions of voice, speech, language, hearing, and swallowing.

A4. Identify the developmental and aging processes as to voice, language, speech, hearing, and swallowing.

A6. Acquire specific 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 specific 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. Dysarthria due to neurological (central, peripheral) and muscular diseases.

A8. Acquire specific 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 specific 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).

A15. Acquire teaching abilities relevant to disorders of voice, speech, language and swallowing in order to participate in planning and implantation of that field.

A16. Know the Legal and medicolegal aspects in practise of phoniatic 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 ailments 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.
- B12.** Acquaints himself with the methodology of scientific research in the field of voice, speech, language and swallowing disorders in order to carry out efficiently academic and field research work.

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 symptomatology 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.
- 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 dysarthrias.
- 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.
- D5.** Practices the activities of group interaction in order to be able participate efficiently in the activities of the clinical teams.
- D6.** Apply principles of medical ethics in dealing with patient information by keeping patient privacy and confidentiality even with multi-personnel accessibility to patient data.
- D7.** On the basis of the knowledge, competence, and skill he has acquired during his training, a phoniatician 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 phoniatic 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:

Subjects	Lectures /seminars	Clinical/Lab	Field	Total lectures Hours
(I) Language Disorders subcourse (PHON 524PDTa):				
(A) Delayed language development in children: (1) Definitions, etiology, 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). - Specific language impairment (SLP).	1×6 lectures	5 hs/15 wks	-----	6 hrs
(2) Assessment protocols for delayed language development in children.	1×2lectures	5hs/15 wks	-----	2hrs
(3) Intervention programs for delayed language development in children (counseling for families and training programs).	1×2 lectures	5 hs/15 wks	-----	2hrs
(B)Dysphasia and Aphasia: (1) Classifications, language organization, symptomatology, spontaneous recovery, agnosia.	1x2 lectures	5 hs/15 wks	---	2 hrs
(2) Assessment protocols for dysphasia and aphasia.	1×3 lectures	5 hs/15 wks	-----	3 hrs
(3) Intervention programs for dysphasia and aphasia.	1×5 lectures	5 hs/15 wks	-----	5 hrs
(C) Learning disability: (1) Disorders of reading, writing and calculating (dyslexia, dysgraphia , dyscalculia): definitions, etiology, features.	1x2 hours	5 hs/15 wks		2hrs
(2) Assessment protocols for learning disabilities.	1×1 lectures	5 hs/15 wks		4 hrs
(3) Intervention programs for learning disabilities.	1×1 lectures	5 hs/15 wks		4hrs
(II) Speech Disorders subcourse (PHON 524PDTb):				
(A) Articulation disorders (dyslalias): (1) Definitions, etiology, types, factors affecting severity and recovery, malocclusion problems.	1×2 lectures	2hs/15 wks		2 hrs
(2) Intervention programs for articulation errors.	1×6 lectures	5 hs/15 wks		6 hrs
(B) Resonance disorders: (1) Types, velopharyngeal incompetence etiology, problems associated with VPI, epidemiology.	1×2 lectures	3hs/15 wks		2 hrs

(2) Assessment protocols for velopharyngeal incompetence.	1×3 lectures	5hs/15 wks		3hrs
(3) Intervention programs for hypernasality.	1×3lectures	5 hs/15 wks		3 hrs
(C) Dysfluency disorders (stuttering and cluttering):		2hs/15 wks		
(1) Definitions, theories, development, symptomatology, severity, prognosis.	1×2 lectures			2 hrs
(2) Assessment protocols for stuttering.	1×1 lectures	5hs/15 wks		1hrs
(3) Treatment strategies for stuttering in children and adults.	1× lectures	5 hs/15 wks		1 hrs
(D) Dysarthrias:		3hs/15 wks		
(1) Classifications, types, characteristics feature. Apraxia of speech and oral apraxia.	1×2 lectures			2 hrs
(2) Assessment protocols for dysarthria, apraxia of speech and oral apraxia.	1×3 lectures	5 hs/15 wks		3 hrs
(3) Intervention programs for dysarthria, apraxia of speech and oral apraxia.	1×5 lectures	5 hs/15 wks		5 hrs
(III) Voice disorders and phonosurgery subcourse (PHON 524PDTc):				
(1) Physio-structural aspects, classification: organic causes (congenital anomalies including sulcus glottideus and acquired causes including dysplasia endocrinopathies, vocal fold immobility, malignant neoplasms and spasmodic dysphonia.), MAP lesions and non-organic (functional) voice disorders, psychogenic dysphonia and aphonia.	1×10 lectures			10 hrs
(2) Assessment protocols for evaluating a case of voice disorder.	1×9lectures	5 hs/15 wks		9 hrs
(3) Intervention programs for voice disorders: - Voice therapy techniques (holistic and specific). - Pharmacological therapy including Botox injection. - Phonsosurgery for optimum voice outcome (Extirpation endolaryngeal microsurgery, vocal fold augmentation and intracordal injections and TEP voice prosthesis) - Rehabilitation of the laryngectomee	1×11 lectures	10 hs/15 wks		11 hrs
(IV) Swallowing Disorders subcourse (PHON 524PDTd):				
(A) oro-pharyngeal dysphagia in children:				
(1) Physiological breakdown of feeding and deglutition, epidemiology, causes and abnormal feeding behaviors, clinical subtypes of feeding and swallowing disorders.	1×2 lectures			2 hrs
- Assessment of feeding and swallowing problems in	1×3 lectures	3 hs/15 wks		3 hrs

children (bed side and instrumental assessment).				
- Management of feeding and swallowing problems in children including management of drooling.	2×1 lectures	5 hs/15 wks		2 hrs
(B) oro-pharyngeal dysphagia in adults: (1) Physiological breakdown of deglutition, epidemiology, causes, associated symptoms and signs.	1×2 lectures			2hrs
- Assessment of oro-pharyngeal dysphagia in adults (bed side and instrumental assessment).	3×1 lectures	2 hs/15 wks		3 hrs
- Management of oro-pharyngeal dysphagia in adults.	3×1 lectures	5hs/15 wks		3 hrs
Total	105 hrs lectures/45 wks	120 clinical hrs / 45 wks		105 hrs/ 45 wks

(4) Teaching methods:

- 4.1. Lectures
- 4.2. Power point presentation.
- 4.3 case presentation every week.

(5) Assessment methods:

- 5.1. Written exam for assessment of A1,4, 6-9, 15, B1-12, D1,5,6,7 (after 30 months from the date of registration to the degree).
- 5.2 Oral/ clinical exam for assessment of C1-3, 5-17
- 5.3 MCQ continuous assessment at the end of each semester.

(6) Percentage of each assessment to the total mark:

- 6.1. Written exam. 200 marks (including 40 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.
- 7.13. 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 Phoniater 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 Phoniater 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