



Course Specification (Bachelor)

Course Title: Electrophysiological Tests

Course Code: AUD 341

Program: Bachelor of Science in Audiology and Balance (BSc)

Department: Department of health Communication Sciences

College: College of Health and Rehabilitation Sciences

Institution: Princess Nourah bint Abdulrahman University (PNU)

Version: 2

Last Revision Date: 1-Oct-2023







Table of Contents

A. General information about the course:	3
B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods	4
C. Course Content	5
D. Students Assessment Activities	6
E. Learning Resources and Facilities	6
F. Assessment of Course Quality	7
G. Specification Approval	7





A. General information about the course:

1. Course Identification

1. Credit hours: 4 hours (2 theory, 1 practical, 1 clinical)

2. C	2. Course type					
Α.	□University	□College	🛛 Depa	rtment	□Track	□Others
В.	☐ Required □Elective					
3. Level/year at which this course is offered: 3 rd year, level 5						

4. Course general Description:

Electrophysiological Tests (AUD 341) is considered a required course in audiology and balance program, in bachelor Communication Science department that teach in 3rd year, level 5, with 4 credit hours. This course discusses advanced procedures for acquiring and interpreting auditory electrophysiologic tests.

5. Pre-requirements for this course (if any):

Neurology of Hearing and Balance (AUD 211) Anatomy and Physiology of the Hearing and Balance Mechanisms (AUD212)

6. Co-requisites for this course (if any):

NA

7. Course Main Objective(s):

Students will be able to:

- Describe the anatomy, physiology, and electrophysiology as related to auditory evoked potentials.
- Describe the relative merits of structural versus functional measure in neuroaudiological diagnosis and understand the patterns of behavioral and electrophysiological measures in cochlear versus retro cochlear disorder.
- Describe the fundamentals of averaging, filtering, amplifying, and sampling as related to auditory evoked potential.
- Apply the knowledge and skills obtained in the subject to determine appropriate electrophysiological assessment techniques.
- Distinguish between the major characteristics of ABRs, ECoGs, MLRs, and LLRs., ASSR, OAE





- Describe and apply evidence-based practice principles used to determine best clinical practices.
- Perform and interpret the full range of electrophysiological assessments.
- Apply tests relevant to best patient management; use this information in terms of problem-solving and information seeking

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	120	100%
2	E-learning		
3	HybridTraditional classroomE-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	30
3.	Field	
4.	Tutorial	
5.	Others (specify): clinical	60
Total		120

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Recognize the use of electrophysiological test for neuro-audiological diagnosis	К2	Lectures and clinical session	Written exam, Practical exam
2.0	Skills			





Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.1	Select the appropriate audiological test according to the presented case	S2	Lectures and clinical session	Written exam, Practical exam
2.2	Perform full range of electrophysiological test assessments.	S1	Lectures and clinical sessions	Practical exam
2.3	Interpret the full range of electrophysiological test assessments	S2	Lectures and clinical sessions	Written exam, Practical exam
3.0	Values, autonomy, and responsibility			
3.1	Demonstrate professionalism in practice	V1	Clinical sessions	Practical exam

C. Course Content

No	List of Topics	Contact Hours
	Introduction, discussion of syllabus	8
1.	Anatomical and physiologic components of the peripheral and central pathways	
2.	Basic concepts of bioengineering, signal processing (filtering, averaging, time domain and spectral analysis), and the types of acoustic stimuli and their calibration.	8
3.	Auditory Brainstem evoked Response (ABR)	32
4.	Otoacoustic emission	16
5.	ECoGs	8
6.	ASSR	16
7.	Middle latency response	8
8.	Late latency response	8
9.	Update of electrophysiological test	16
	Total	120





D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	First Midterm Examination	6 th - 7 th week	15%
2.	Second Midterm Examination	10 th -11 th week	15%
3.	Professional writing assignment, case presentation, quizzes and/or specific reviews	Throughout semester	10%
4.	Quizzes on the practical part	Throughout semester	10%
5.	Final practical exam	15 th week	10%
6.	Final Written Examination	16 th -18 th week	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	 Atcherson, S., and Stoody, T. (2012). Auditory electrophysiology: a clinical guide. New York: Thieme. Katz, J., Chasin, M., English, K., Hood, L., & Tillery, K. (2014). Handbook of clinical audiology. (7th ed.). Philadelphia: Lippincott Williams & Wilkins.
Supportive References	
Electronic Materials	Digital library
Other Learning Materials	Blackboard

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms with 30-40 seats
Technology equipment (projector, smart board, software)	Smart BoardComputerData show projector or E-podium
Other equipment (depending on the nature of the specialty)	Related to the topics.





F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students / program coordinator.	Direct /Indirect
Effectiveness of	Students / exam and	Direct /Indirect
Students' assessment	assessment committee.	
Quality of learning resources	Students	Direct /Indirect
The extent to which CLOs have been achieved	Instructor, program coordinator	Direct
Assessors (Students, Faculty, Program Leaders	, Peer Reviewer, Others (specify)	

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	Department Council
REFERENCE NO.	7
DATE	04/10/2023







Course Specification (Bachelor)

Course Title: Audiology I

Course Code: AUD 331

Program: Bachelor of Science in Audiology and Balance (BSc)

Department: Department of health Communication Sciences

College: College of Health and Rehabilitation Sciences

Institution: Princess Nourah bint Abdulrahman University (PNU)

Version: 2

Last Revision Date: 1-Oct-2023







Table of Contents

A. General information about the course:	3
B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods	4
C. Course Content	5
D. Students Assessment Activities	5
E. Learning Resources and Facilities	5
F. Assessment of Course Quality	6
G. Specification Approval	6





A. General information about the course:

1. Course Identification

1. Credit hours: 3 hours (2 theory, 1 practical, 0 clinical).

2. Course type					
Α.	□University	□College	🛛 Department	□Track	□Others
В.	☐ Required □Elective				
3. Level/vear at which this course is offered: 3rd year. level 5					

4. Course general Description:

The course discusses the basic knowledge of audiological assessment. It also provides the students with an opportunity to learn about audiology practice. This practical-based module aims to develop skills in audiological assessment procedures.

5. Pre-requirements for this course (if any):

Introduction to Hearing and Speech Sciences (HCS 201) Anatomy and Physiology of the Hearing & Balance Mechanisms (AUD 212)

6. Co-requisites for this course (if any):

NA

7. Course Main Objective(s):

By the end of the course, a student should be able to:

- Understand the basic knowledge of audiological assessment.
- Perform basic audiological tests including pure tone audiometry, speech audiometry and tympanometry.
- Determine the type and degree of hearing loss and related disorders.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	100%
2	E-learning		
	Hybrid		
3	Traditional classroomE-learning		
4	Distance learning		





3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	30
3.	Field	
4.	Tutorial	
5.	Others (specify)	
Total		60

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Demonstrate a sufficient knowledge in the theoretical background of audiological assessment for the diagnosis of hearing loss.	К2	lecture	Written exam
2.0	Skills			
2.1	Select the appropriate audiological test according to the presented case	S2	Lecture, practical and clinical sessions	Written exam Practical exam
2.2	Perform full audiological assessment	S1	Practical and clinical sessions	Practical exam
2.3	Interpret the full range of audiological assessments	S2	Lectures, practical and clinical sessions	Written and practical exams
3.0	Values, autonomy, and responsibility	y		
3.1	Demonstrate professionalism in practice	V1	Practical and clinical sessions	Practical and clinical sessions





C. Course Content

No	List of Topics	Contact Hours
1	Introduction ,Discussion of the syllabus.	
1.	Review of anatomy and physiology of the auditory system	4
2	Otoscopy	4
۷.	Diagnostic tunning forks tests	4
3.	Pure tone audiometry	16
4.	Masking	8
5.	Speech Audiometry	8
6.	Tympanometry	12
7.	Calibration	8
	Total	60

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	First Midterm Examination	6 th - 7 th week	15%
2.	Second Midterm Examination	$11^{th} - 12^{th}$ week	15%
3.	Professional writing assignment, case presentation, and/or specific reviews	Throughout semester	10%
4.	Mid practical exam	Throughout semester	10%
5.	Final practical exams	15 th week	10%
6.	Final Written Examination	$16^{th} - 18^{th}$ week	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Clinical Audiology: An Introduction, Brad A. Stach. Singular, 2nd edition, 2008. Handbook of Clinical Audiology. Jack Katz, Larry Medwetsky, Robert Burkard and Linda Hood. Williams & Wilkins, 7th edition, 2014
Supportive References	
Electronic Materials	Electronic Library
Other Learning Materials	Blackboard





2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms with 30-40 seats
Technology equipment (projector, smart board, software)	 Board Computer Data show projector or E-podium
Other equipment (depending on the nature of the specialty)	Related to the topics

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students / program coordinator.	Direct /Indirect
Effectiveness of Students' assessment	Students / exam and assessment committee.	Direct /Indirect
Quality of learning resources	Students	Direct /Indirect
The extent to which CLOs have been achieved	Instructor, program coordinator	Direct

Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify) Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	Department Council
REFERENCE NO.	7
DATE	04/10/2023







Course Specification (Bachelor)

Course Title: Psychosocial Aspects of Hearing Loss

Course Code: AUD 327

Program: Bachelor of Science in Audiology and Balance (BSc)

Department: Department of health Communication Sciences

College: College of Health and Rehabilitation Sciences

Institution: Princess Nourah bint Abdulrahman University (PNU)

Version: 2

Last Revision Date: 1-Oct-2023







Table of Contents

A. General information about the course:	3
B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods	4
C. Course Content	4
D. Students Assessment Activities	5
E. Learning Resources and Facilities	5
F. Assessment of Course Quality	6
G. Specification Approval	6





A. General information about the course:

1. Course Identification

1. Credit hours: 2 hours (2 theoretical, 0 practical, 0 clinical)

2. Course type						
Α.	□University	□College	⊠ Department	□Track	□Others	
В.	☐ Required □Elective					
3. Level/year at which this course is offered: 3 rd Year, Level 5						
_						

4. Course general Description:

This course focuses on studying the different negative consequences of hearing impairment. Specifically, this course focuses on psychological and social negative effects accompany hearing loss.

5. Pre-requirements for this course (if any):

NA

6. Co-requisites for this course (if any):

NA

7. Course Main Objective(s):

- Understand the psychological effects associated with hearing loss for the affected person and his/her family and significant others.
- Appreciate the negative social effects of hearing loss.
- Use knowledge acquired from this course to enable the students better assess the patient' psychological and social life.
- Determine effective coping mechanisms to be used by the hearing-impaired people that he /she are taking care off.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	30	100%
2	E-learning		
3	Hybrid Traditional classroom E-learning 		
4	Distance learning		





3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
Total		30

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Describe psychosocial side effects of hearing impairment.	К2	Lectures	Written exams
1.2	Outline different coping strategies used by hearing impaired people	К2	Lectures	Written exams
2.0	Skills			
2.1	Enhance group functioning by encouraging teamwork on assignments and discussion of cases.	S3	Group discussions	Assignment

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to syllables Effects of hearing impairment on the individual and society.	6
2.	Psychological and social effects of hearing impairment.	12
3.	Managing side effects of hearing impairment, use of effective coping strategies.	10
4.	Class presentation	2
	Total	30





D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	1 st Midterm Examination	6 th - 7 th week	20%
2.	2 nd Midterm Examination	10 th - 11 th week	20%
3.	Professional writing assignment, group activities and discussion (oral presentation)	Throughout semester	20%
4.	Final Written Examination	$16^{th} - 18^{th}$ week	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Voices from a Quieter Land: Insight into the Impact of Hearing Impairment (2001). Authors: Donna Wayner & Ellen Rupert Publisher: Hear Again Inc- ISBN-13: 978-0966478075
Supportive References	
Electronic Materials	Electronic library
Other Learning Materials	Blackboard

2. Required Facilities and equipment

Items	Resources		
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms with a capacity of at least 30-40 seats		
Technology equipment (projector, smart board, software)	 Smart Board Computer Data show projector or E-podium 		
Other equipment (depending on the nature of the specialty)	Related to the topics		





F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods		
Effectiveness of teaching	Students / program coordinator.	Direct /Indirect		
Effectiveness of	Students / exam and	Direct /Indirect		
Students' assessment	assessment committee.			
Quality of learning resources	Students	Direct /Indirect		
The extent to which CLOs have been achieved	Instructor, program coordinator	Direct		
Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)				

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	Department Council
REFERENCE NO.	7
DATE	04/10/2023







Course Specification (Bachelor)

Course Title: Pathophysiology of Hearing Disorders

Course Code: AUD 316

Program: Bachelor of Science in Audiology and Balance (BSc)

Department: Department of Health Communication Sciences

College: College of Health and Rehabilitation Sciences

Institution: Princess Nourah Bint Abdulrahman University

Version: 2

Last Revision Date: 1-Oct-2023







Table of Contents

A. General information about the course:	3
B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods	4
C. Course Content	5
D. Students Assessment Activities	5
E. Learning Resources and Facilities	5
F. Assessment of Course Quality	6
G. Specification Approval	6





A. General information about the course:

1. Course Identification

1. Credit hours: 4 (3 theoretical, 1 practical, 0 clinical)

2. C	2. Course type						
Α.	□University	□College	🛛 Depa	rtment	□Track	□Others	
В.	☑ Required □Elective						
3. Level/year at which this course is offered: 3 rd year, level 5							

4. Course general Description:

Pathophysiology of Hearing and Balance Mechanism (AUD316) is considered a required course in audiology and balance program, in bachelor Communication Science department that teach in 3rd Year, 5th level with 4 credit hours. This course will approach hearing pathological disorders from a broad perspective beginning with pathophysiology, etiology and audiological assessment. The focus will be on both the pediatric and adult population.

Administration and interpretation of audiometric procedures for differential diagnosis of auditory pathology will be addressed. It focuses on Management of causes of hearing problems and study of inter -professional, economic, legal and ethical aspects of program planning and administration. The student will learn how to apply hearing services in a multiplicity of settings and study the relationship between hearing services and educational health, social and industrial programs. Study of the relationships between hearing pathologists and members of allied professionals will also be discussed.

5. Pre-requirements for this course (if any):

Anatomy & Physiology of the Hearing & Balance Mechanisms (AUD 212)

6. Co-requisites for this course (if any):

NA

7. Course Main Objective(s):

Students will be able to:

- Identify appropriate assessment and management of the hearing system
- Assess efficacy of interventions and treatment for hearing disorders.
- Implement appropriate referral criteria for adults and children based upon evaluation results and history.

Collaborate with other health care providers as needed to use the results of such assessment in patient's diagnosis and management.





2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	75	100%
2	E-learning		
	Hybrid		
3	Traditional classroomE-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	30
3.	Field	
4.	Tutorial	
5.	Others (specify)	
Total		75

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understandin	g		
1.1	Understand hearing pathology disorders from a broad perspective, beginning with pathophysiology, etiology, audiological assessment and management	К2	Lectures and practical sessions	Written exam.
2.0	Skills			
2.1	Select the appropriate audiological test according to the presented case	S2	Lectures and practical sessions	Written exam, practical exam
2.2	Interpret the full range of audiological assessments	S2	Lectures and clinical sessions	Written exam, Practical exam
3.0	Values, autonomy, and responsibility			
3.1	Demonstrate professionalism in practice	V1	Practical sessions	Practical exam





C. Course Content

No	List of Topics	Contact Hours
1	Management of outer ear disorders	5
2	Management of middle ear disorders	15
3	Midterm	3
4	Management of inner ear disorders	15
5	Management of retrochochlear disorders	15
6	Hearing system and aging	2
7	Otologic manifestations of systemic disease	5
8	Tinnitus	5
9	Noise induces hearing loss	5
10	Recent topics in hearing disorders	5
	Total	75

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	First Midterm Examination	6 th - 7 th week	15%
2.	Second Midterm Examination	11 th - 12 th week	15%
3.	Professional writing assignment, case presentation, quizzes and/or specific reviews	Throughout semester	15%
4.	Practical Exam	Throughout semester	15%
5.	Final Written Examination	16 th – 18 th week	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	An introduction to physiology of hearing (4th edition 2013) Authors: James Pickles, Publisher: BRILL, ISBN-I3: 97 8-90042437 7 4
Supportive References	Anatomy and Physiology of Hearing for Audiologist (First edition,2007) Author: William Clark and Kevin Ohl miller, Publisher: Singular, ISBN-I3 : 97 8-1401814441
Electronic Materials	Varies each time course is taught to keep the course up to date
Other Learning Materials	Black board





2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms with 20- 30 seats
Technology equipment (projector, smart board, software)	Smart BoardComputerData show projector or E-podium
Other equipment (depending on the nature of the specialty)	Related to the topics.

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students / program coordinator.	Direct /Indirect
Effectiveness of	Students / exam and	Direct /Indirect
Students' assessment	assessment committee.	
Quality of learning resources	Students	Direct /Indirect
The extent to which CLOs have been achieved	Instructor, program coordinator	Direct
Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)		

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	Department Council
REFERENCE NO.	7
DATE	04/10/2023

