



<b>Form: Course Syllabus</b>	<b>Form Number</b>	EXC-01-02-02A
	<b>Issue Number and Date</b>	2/3/24/2022/2963 05/12/2022
	<b>Number and Date of Revision or Modification</b>	
	<b>Deans Council Approval Decision Number</b>	2/3/24/2023
	<b>The Date of the Deans Council Approval Decision</b>	23/01/2023
	<b>Number of Pages</b>	06

1.	<b>Course Title</b>	Hearing aids
2.	<b>Course Number</b>	1804433
3.	<b>Credit Hours (Theory, Practical)</b>	Bachelor in Hearing and Speech Sciences
	<b>Contact Hours (Theory, Practical)</b>	3 theory
4.	<b>Prerequisites/Corequisites</b>	1804231
5.	<b>Program Title</b>	Department of Hearing and Speech Sciences
6.	<b>Program Code</b>	04
7.	<b>School/Center</b>	School of Rehabilitation Sciences
8.	<b>Academic Department</b>	Hearing and Speech Sciences
9.	<b>Course Level</b>	2
10.	<b>Year of Study/Semester</b>	2023-2024, Second semester
11.	<b>Program Degree</b>	Bachelors
12.	<b>Other Departments involved in Teaching the course</b>	None
13.	<b>Main Teaching Instruction</b>	Sara Alhanbali
14.	<b>Learning Types</b>	<input type="checkbox"/> Face to Face <input type="checkbox"/> Blended <input type="checkbox"/> Fully Online
15.	<b>Online Platform(s)</b>	<input type="checkbox"/> Moodle <input type="checkbox"/> Microsoft Teams
16.	<b>Issuing Date</b>	3/10/2024
17.	<b>Revision Date</b>	

**18. Course Coordinator**

Name: Sara Alhanbali	Contact hours: Monday/Wednesday 10-12
Office number:	Phone number:
Email: s.alhanbali@ju.edu.jo	



## 19. Other Instructors

--

## 20. Course Description

**This module will cover the components and acoustic and electronic characteristics of hearing aids. It will discuss the different types of hearing aids and other assistive devices, as well as procedures for their evaluation, measurement, prescription, and fitting. The course will also explore the advanced features available in modern hearing aids and the methods used to assess their outcomes and benefits.**

## 21. Program Learning Outcomes

### Program Learning Outcomes Descriptors (PLOD)

PLO	National Qualification Framework Descriptors*		
	Knowledge (A)	Skills (B)	Competency (C)
Develop and integrate knowledge from foundational courses; including basic sciences, medical sciences, and research methods to reflect on rehabilitation sciences practice.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demonstrate knowledge of the role of audiologists and speech therapists in working with patients with communication and hearing disorders.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demonstrate knowledge of the basic principles and methods of prevention, assessment, and intervention for individuals with communication and hearing disorders	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apply and integrate evidence-based clinical skills (diagnosis, assessment, and intervention) in working with individuals with communication and hearing disorders.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compose effective oral and written communication for clinical and professional purposes including the use of information technology resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Operate within interprofessional teams of healthcare providers, clients, communities, and organizations in traditional and emerging practices and illustrate the qualities of a lifelong learner	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Apply leadership and management skills to advance Jordan and the global community scientifically, socially, and technologically in rehabilitation sciences.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Generate scientific research that advances rehabilitation practices locally and globally.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Analyse the needs of clients and develop comprehensive individualized rehabilitation plan and apply ethical principles to promote inclusion, participation, safety, and wellbeing for all clients.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------

\*Choose only on descriptor for each PLO; either knowledge, or skills, or competencies.

**22. Course Learning Outcomes: By the end of this course, the student is expected to achieve the following Learning outcomes:**

- 1- Identify, explain, and define the fundamental components of hearing aids.
- 2- Outline the purpose and sequential steps involved in electroacoustic analysis and troubleshooting of amplification devices.
- 3- Articulate the purpose, rationale, and sequential process of real-ear measurement in assessing amplification performance.
- 4- Define key elements and applications of earmold acoustics within the context of hearing aid fitting procedures.
- 5- Exhibit comprehension of prescriptive methods used to determine hearing aid amplification characteristics, including gain, frequency response, and output.
- 6- Examine and explain the considerations involved in selecting and adjusting hearing aid parameters to accommodate individualized hearing loss profiles.
- 7- Acquire knowledge of standardized outcome measures available for assessing the efficacy of hearing aid use.
- 8- Critically evaluate emerging trends and advancements in hearing aid technology, and assess their potential impact on clinical practice and patient outcomes.

**Matrix of Course Learning Outcomes according to National Qualification Framework Descriptors**

CLO Number	Knowledge		Skills				Competencies
	Remember	Understand	Apply	Analyze	Evaluate	Create	
1	X						
2			X				
3			X				
4			X				
5		X					
6							X
7		X					
8							X



### 23. Matrix linking Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs)

CLO \ PLO*	1	2	3	4	5	6	7	8	9	10	**Descriptors		
											A	B	C
1.				X							X		
2.		X		X								X	
3.			X	X								X	
4.			X									X	
5.			X								X		
6.					X								X
7.			X								X		
8.									X				X

\*Map each Course Learning Outcome to ONLY one Program Learning Outcome based on Courses Matrix

\*\* Descriptors are assigned based on (PLO) that was chosen and specified in the program learning outcomes matrix in item (21)

### 23. Topic Outline and Schedule:

Week	Lecture	Topic	ILO/s Linked to the Topic	Learning Types (Face to Face/ Blended/ Fully Online)	Platform Used	Synchronous / Asynchronous Lecturing	Evaluation Methods	Learning Resources
1	1.1	History of hearing aids		Face to Face	-	Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	1.2	History of hearing aids		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	1.3	History of hearing aids		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
2	2.1	Styles of hearing aids		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	2.2	Styles of hearing aids		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon



	2. 3	Hearing aid components		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
3	3. 1	Hearing aid components		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	3. 2	Hearing aid components		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	3. 3	Hearing aid components		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
4	4. 1	Ear molds		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	4. 2	Ear molds		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	4. 3	Ear molds		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
5	5. 1	Hearing aid programming		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	5. 2	Hearing aid programming		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	5. 3	Hearing aid programming		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
6	6. 1	Hearing aid programming (guest speaker)		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	6. 2	Hearing aid verification		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	6. 3	Hearing aid verification		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
7	7. 1	Hearing aid verification		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	7. 2	Hearing aid verification		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	7. 3	Problem solving and fine tuning		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
8	8. 1	Problem solving and fine tuning		Face to Face		Synchr onous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon



	8.2	Problem solving and fine tuning		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	8.3	Problem solving and fine tuning		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
9	9.1	Prescription procedures		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	9.2	Prescription procedures		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	9.3	Prescription procedures		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
10	10.1	Prescription procedures		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	10.2	Candidacy for hearing aids		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	10.3	Candidacy for hearing aids		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
11	11.1	Candidacy for hearing aids		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	11.2	Candidacy for hearing aids		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	11.3	Patient counseling		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
12	12.1	Patient counseling		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	12.2	Patient counseling		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	12.3	Patient counseling		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
13	13.1	Advanced hearing aid features		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	13.2	Advanced hearing aid features		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	13.3	Advanced hearing aid features		Face to Face		Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon



14	14 .1	Advanced hearing aid features (Guest Speaker)	Face to Face	Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	14 .2	Outcome measures	Face to Face	Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	14 .3	Outcome measures	Face to Face	Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
15	15 .1	Outcome measures	Face to Face	Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	15 .2	Outcome measures	Face to Face	Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon
	15 .3	Guest feature	Face to Face	Synchronous	Quizzes, exams, assignments	Hearing Aids, Harvey Dillon

## 25. Evaluation Methods:

Course Evaluation Plan								
Evaluation Activity	Mark*	Course Learning Outcomes						Columns can be added by the number of outcomes
		1	2	3	4	5	6	
First Exam (mid exam)								
Second Exam								
Final Exam								
Classwork								
Evaluation of Semester work	Projects/Reports							
	Research/Worksheets							
	Fieldwork visits							
	Clinical and practical performance							
	Portfolio							
	Presentations							
	Simulation/Modeling							
	Discussion							
	Quizzes							
	Exercises							
	Interviews							
Conferences								
Any other evaluation activities approved by the faculty committee								
<b>Total Marks (100%)</b>								

\* According to the instructions for granting a bachelor's degree

القوانين والأنظمة والتعليمات :: الجامعة الأردنية (ju.edu.jo)

\*\*According to the instructions of organizing semester work, tests, examinations, and grades for the bachelor's degree.



### Mid-term exam descriptions table\*

CLO no.	CLO Weight	Total no. of questions	Total exam mark	No. of questions per CLO	No. of questions/ cognitive level					
					Remember 30%	Understanding 20%	Applying 20%	Analyze 10%	Evaluate 10%	Create 10%

\* A table of descriptions is added in the case of courses that require a second exam.

### Final exam descriptions table

CLO no.	CLO Weight	Total no. of questions	Total exam mark	No. of questions per CLO	No. of questions/ cognitive level					
					Remember 30%	Understanding 20%	Applying 20%	Analyze 10%	Evaluate 10%	Create 10%

## 26. Course Requirements

Students should have a computer, internet connection, webcam, account on Microsoft teams.

## 27. Course Policy

A- Attendance policies:

- Attendance will be taken periodically throughout the semester.
- Students are expected to attend and actively participate in all classes.
- Students are expected to be on time.
- When the student is unable to attend class, it is a courtesy to notify the instructor in advance using either e-mail or phone.
- Repeated tardiness or leaving early will not be accepted.
- Students who miss class (or any portion of class) are responsible for the content. Any student who misses a class has the responsibility for obtaining copies of notes, handouts, assignments, etc. from class members who were present. If additional assistance is still necessary, an appointment should be scheduled with the instructor. Class time is not to be used to go over material with students who missed class(es).





- An absence of more than 15% of all the number of classes, which is equivalent of (...) classes, requires that the student provides an official excuse to the instructor and the dean.
- If the excuse was accepted the student is required to withdraw from the module.
- If the excuse was rejected the student will fail the module and mark of zero will be assigned as suggested by the laws and regulations of the University of Jordan. Please refer to pages 133, 134 of the student handbook.

**B- Absences from exams and submitting assignments on time:**

- The instructor will not do any make-up exams.
- Exceptions for make-up exams and late submission of class assignments will be made on a case-by-case basis for true personal emergencies that are described as accepted by the regulations of UJ (e.g., documented medical, personal, or family emergency).
- Make-up exams will be arranged if justifications for missing the exam satisfy the above. It is the student's responsibility to contact the instructor within 24 hours of the original exam to schedule a make-up session. A make-up exam should be taken within a week from the original exam date, unless the student can provide documentation that makes meeting that deadline impossible; otherwise, the recorded score for that exam for the student will be a zero.
- Late assignments will not be accepted and submission of assignments (due to unjustified absence from class) by other students will not be accepted regardless of how much work the student put into its preparation.

**C- Health and safety procedures:**

- Students will not be in direct contact with patients during this course.
- Students are not expected to use any heavy tools or equipment that might impose health and safety issues during this course.

**D- Honesty policy regarding cheating, plagiarism, misbehavior:**

- Students are expected to observe all University guidelines pertaining to academic misconduct.
- Any work submitted by a student for academic credit must be the student's own work. Submission of work taken directly from another source (e.g., book, journal, internet, clinic forms, or another student work) will be considered plagiarism and the student/group will get a zero grade for that work if part of an assignment. In addition, if copying occurred, both the student who copied the work and the student who gave material to be copied (if applicable) will receive a zero for the assignment.
- Students are expected to do work required for assignments on their own. Asking other instructors at the JU clinic or the staff, or other students to assist in or do any part of the assignment for them will negatively affect their grade on that assignment. The course instructor is the person the student needs to talk to if s/he has any difficulties pertaining to an assignment or project and is strongly encouraged to schedule an appointment with the instructor if such difficulties arise during the semester.
- Course materials prepared by the instructor, together with the content of all lectures and review sessions presented by the instructor are the property of the instructor. Video and



audio recording of lectures and review sessions without the consent of the instructor is prohibited.

- Any forms of academic misconduct will be handled according to the University of Jordan guidelines.

E- Grading policy:

Grading for this course will be determined based upon the accumulation of points for variety of assignments and exams. All work will be evaluated on completeness, organization, clarity of information, and the integration and application of the material.

F- Available university services that support achievement in the course:

The University of Jordan provides many services to support social, health, and mental well-being of students in general and students with disabilities in specific. Students are advised to visit the Faculty of Students Affairs to learn more about those services. If you are a student with a disability for which you may request accommodations, please notify the staff of Services for Student with Disabilities (Faculty of Students Affairs) as soon as possible. Please also contact the instructor as soon as possible (email is acceptable) so the appropriate accommodations for this course can be made.

**28. References**

A- Required book(s), assigned reading and audio-visuals:

Dillon, H. (2010). Hearing Aids. New York: Thieme.

B- Recommended books, materials and media:

Taylor, B. & Mueller, H. G. (2011). Fitting and Dispensing Hearing Aids. San Diego, CA: Plural Publishing.

**29. Additional Information**

--	--

Name of the Instructor or the Course Coordinator: Sara Alhanbali.....	Signature: Sara Alhanbali .....	Date: .....
Name of the Head of Quality Assurance Committee/ Department Sara Alhanbali .....	Signature: SH.....	Date: 24/10/2024
Name of the Head of Department Sara Alhanbali .....	Signature: SH.....	Date: 24/10/2024
Name of the Head of Quality Assurance Committee/ School or Center Prof. Kamal Al Hadidi	Signature: KAH .....	Date: 24/10/2024
Name of the Dean or the Director	Signature:	Date:



---

Prof. Kamal Al Hadidi	KAH.....	24/10/2024
-----------------------	----------	------------