



<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
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	<b>Number of Pages</b>	06

1.	Course Title	Anatomy and Physiology of Hearing and Speech
2.	Course Number	1804100
3.	Credit Hours (Theory, Practical)	3 hours (Theory)
	Contact Hours (Theory, Practical)	3 hours per week (Theory)
4.	Prerequisites/Corequisites	N/A
5.	Program Title	Bachelor in Hearing and Speech Sciences
6.	Program Code	1804
7.	School/Center	Rehabilitation Sciences
8.	Academic Department	Hearing & Speech Sciences
9.	Course Level	First year
10.	Year of Study/Semester	2024/2025-Second semester
11.	Program Degree	Undergraduate
12.	Other Departments involved in Teaching the course	None
13.	Main Teaching Instruction	English
14.	Learning Types	<input type="checkbox"/> Face to Face <input type="checkbox"/> Blended <input type="checkbox"/> Fully Online
15.	Online Platform(s)	<input type="checkbox"/> Moodle <input type="checkbox"/> Microsoft Teams
16.	Issuing Date	10/12/2020
17.	Revision Date	

**18. Course Coordinator**

Name: Mohammad A. Damhoureyeh, MA, SLP	Contact hours: Thursday: 11:30- 1:30
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### 19. Other Instructors

Name:	Contact hours:
Office number:	Phone number:
Email:	

### 20. Course Description

As stated in the approved study plan.

Study of the anatomy & physiology of hearing & speech mechanisms. It includes hearing & balance, respiratory , phonatory , articulatory & resonance mechanisms , and neurophysiological principles fundamental to the understanding of hearing & speech & voice production .

Experienced specialists are asked to help in giving lectures and/or a variety of interactive activities

### 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 type="checkbox"/>	<input checked="" 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



traditional and emerging practices and illustrate the qualities of lifelong learner.			
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"/>
Analyze the needs of clients and develop comprehensive individualized rehabilitation plans 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. Define the basic terminology used in anatomy.
2. Identify the basic structure and function of the hearing, respiration, phonation, articulation, resonance, and nervous systems mechanisms.
3. Relate the systems of speech to their physiology.
4. Understand the professional reports for patient with communication and hearing disorders
5. Relate the different systems to each other and to speech
6. Analyze and synthesis the model of larynx, individually, and name each structure of the respiratory, phonatory, articulatory and nervous systems from the anatomical picture for the human body. Then, students will be able to explain how these systems work together to produce speech. Finally, students will be determining each structure of the ear apparatus and their function
7. Relate the pathological communication disorders to the language/ speech/ hearing systems anatomy and physiology.

**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					



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

CLO \ PLO*	1	2	3	4	5	6	7	8	9	**Descriptors		
										A	B	C
1.	X									X		
2.	X									X		
3.	X									X		
4.			X							X		
5.				X							X	
6.				X							X	
7.									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)	Platform Used	Synchronous / Asynchronous Lecturing	Evaluation Methods	Learning Resources
1	1 . 1	Syllabus and Introduction to terms of orientation	1 , 2	Face to face	Microsoft Teams + Moodle	Synchronous	Participation - Attendance. - written test and Quizzes.	Reference A
	1 . 2	Structural and functional anatomy of the outer ear	1 - 6	Face to face	Microsoft Teams + Moodle	Synchronous	Participation - Attendance. - written test and Quizzes.	Reference A
	1 . 3	Structural and functional anatomy of the outer ear	1 - 6	Face to face	Microsoft Teams + Moodle	Synchronous	Participation - Attendance. - written test and Quizzes.	Reference A



2	2 . 1	Structural and functional anatomy of the middle ear.	1 - 6	Face to face	Microsoft Teams + Moodle	Synchronous	Participation - Attendance. - written test and Quizzes.	Reference A
	2 . 2	Structural and functional anatomy of the middle ear.	1 - 6	Face to face	Microsoft Teams + Moodle	Synchronous	Participation - Attendance. - written test and Quizzes.	Reference A
	2 . 3	Structural and functional anatomy of the middle ear. Physiology of the outer and middle ear.(Con.)	1 - 6	Face to face	Microsoft Teams + Moodle	Synchronous	Participation - Attendance. - written test and Quizzes.	Reference A
3	3 . 1	Inner ear: cochlear anatomy.	1 - 6	Face to face	Microsoft Teams + Moodle	Synchronous	Participation - Attendance. - written test and Quizzes.	Reference A
	3 . 2	Inner ear: cochlear anatomy.	1 - 6	Face to face	Microsoft Teams	Synchronous	Participation	Reference A





					oodle			
	5 · 1	<b>Micromechanics:</b> transduction and hair cell function	1 - 6	Face to face	Mi cr os of f Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
5	5 · 2	<b>Micromechanics:</b> transduction and hair cell function	1 - 6	Face to face	Mi cr os of f Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
	5 · 3	<b>Micromechanics:</b> transduction and hair cell function	1 - 6	Face to face	Mi cr os of f Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
6	6 · 1	<b>Functional organization of the auditory nervous system.</b>	1 - 6	Face to face	Mi cr os of f Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A





6	6 · 2	<b>Functional organization of the auditory nervous system.</b>	1 - 6	Face to face	Mi cr os of t e a m s + M o o d l e	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
	6 · 3	<b>Functional organization of the auditory nervous system.</b>	1 - 6	Face to face	Mi cr os of t e a m s + M o o d l e	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
7	7 · 1	<b>Functional organization of the auditory nervous system. (Con.)</b>	1 - 6	Face to face	Mi cr os of t e a m s + M o o d l e	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
	7 · 2	<b>Functional organization of the auditory nervous system. (Con.)</b>	1 - 6	Face to face	Mi cr os of t e a m s + M o o d l e	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
	7 · 3	<b>Functional organization of the auditory nervous system. (Con.)</b>	1 - 6	Face to face	Mi cr os of t e	Syn chr ono us	Particip ation	Ref eren ce A





1 0	9 · 2	<p><b>Anatomy and Physiology of respiration: (Con.)</b> Boyle's law, Structure of respiratory system, and respiratory musculature.</p>	1 - 6	Face to face	Mi cr os of t e a m s + M o o d l e	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
	9 · 3	<p><b>Anatomy and Physiology of respiration: (Con.)</b> Boyle's law, Structure of respiratory system, and respiratory musculature.</p>	1 - 6	Face to face	Mi cr os of t e a m s + M o o d l e	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
	1 0 · 1	<p><b>Anatomy of phonation:</b> The Bernoulli Effect, Structure of the larynx, Structure of the larynx, and laryngeal musculature, and non speech laryngeal function. <b>Physiology of phonation:</b> Speech laryngeal functions and clinical considerations.</p>	1 - 6	Face to face	Mi cr os of t e a m s + M o o d l e	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
	1 0 · 2	<p><b>Anatomy of phonation (Con.):</b> The Bernoulli Effect, Structure of the larynx, Structure of the larynx, and laryngeal musculature, and non speech laryngeal function. <b>Physiology of phonation:</b> Speech laryngeal functions and clinical considerations.</p>	1 - 6	Face to face	Mi cr os of t e a m s + M o o d l e	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A



103	<p><b>Anatomy of phonation (Con.):</b> The Bernoulli Effect, Structure of the larynx, Structure of the larynx, and laryngeal musculature, and non speech laryngeal function.</p> <p><b>Physiology of phonation:</b> Speech laryngeal functions and clinical considerations.</p>	1-6	Face to face	Micr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
111	<p><b>Anatomy of phonation (Con.):</b> The Bernoulli Effect, Structure of the larynx, Structure of the larynx, and laryngeal musculature, and non speech laryngeal function.</p> <p><b>Physiology of phonation:</b> Speech laryngeal functions and clinical considerations.</p>	1-6	Face to face	Micr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
112	<p><b>Anatomy of phonation (Con.):</b> The Bernoulli Effect, Structure of the larynx, Structure of the larynx, and laryngeal musculature, and non speech laryngeal function.</p> <p><b>Physiology of phonation:</b> Speech laryngeal functions and clinical considerations.</p>	1-6	Face to face	Micr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
113	<p><b>Anatomy of phonation (Con.):</b> The Bernoulli Effect, Structure of the larynx, Structure of the larynx, and laryngeal musculature, and non speech laryngeal function.</p> <p><b>Physiology of phonation:</b> Speech laryngeal functions and clinical considerations.</p>	1-6	Face to face	Micr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
121	<p><b>Anatomy of articulation and resonance:</b> Bones, Dentition, Speech cavities and Muscles of the face and mouth.</p> <p><b>Physiology of articulation and resonance:</b></p>	1-6	Face to face	Micr os off Te	Syn chr ono us	Particip ation	Ref eren ce A



	Articulatory and Resonator function			a ms + M oo dle		- Attenda nce.  - written test and Quizzes.	
1 2 . 2	<b>Anatomy of articulation and resonation (Con.):</b> Bones, Dentition, Speech cavities and Muscles of the face and mouth. <b>Physiology of articulation and resonation:</b> Articulatory and Resonator function	1 - 6	Face to face	Mi cr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
1 2 . 3	<b>Anatomy of articulation and resonation (Con.):</b> Bones, Dentition, Speech cavities and Muscles of the face and mouth. <b>Physiology of articulation and resonation:</b> Articulatory and Resonator function	1 - 6	Face to face	Mi cr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
1 3 . 1	<b>Anatomy of articulation and resonation (Con.):</b> Bones, Dentition, Speech cavities and Muscles of the face and mouth. <b>Physiology of articulation and resonation:</b> Articulatory and Resonator function	1 - 6	Face to face	Mi cr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A
1 3 . 2	<b>Anatomy of articulation and resonation (Con.):</b> Bones, Dentition, Speech cavities and Muscles of the face and mouth. <b>Physiology of articulation and resonation:</b> Articulatory and Resonator function	1 - 6	Face to face	Mi cr os off Te a ms + M	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A



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1 3 · 3	<b>Anatomy of articulation and resonation (Con.):</b> Bones, Dentition, Speech cavities and Muscles of the face and mouth. <b>Physiology of articulation and resonation:</b> Articulatory and Resonator function:	1 - 6	Face to face	Mi cr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A	
1 4 · 1	<b>Anatomy of articulation and resonation (Con.):</b> Bones, Dentition, Speech cavities and Muscles of the face and mouth. <b>Physiology of articulation and resonation:</b> Articulatory and Resonator function	1 - 6	Face to face	Mi cr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A	
1 4 · 2	<b>Anatomy and Physiology of Nervous system and Cranial nerves that related to Speech mechanism.</b>	1 - 6	Face to face	Mi cr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A	
1 4 · 3	<b>Anatomy and Physiology of Nervous system and Cranial nerves that related to Speech mechanism (Con.).</b>	1 - 6	Face to face	Mi cr os off Te a ms + M oo dle	Syn chr ono us	Particip ation  - Attenda nce.  - written test and Quizzes.	Ref eren ce A	



15	15.1	Final Exam	1-7	Computerized	Faculty lab	Synchronous	Computerized test	Reference A
	15.2							
	15.3							

**25. Evaluation Methods:**

Evaluation Activity	Mark*							
		1	2	3	4	5	6	7
First Exam (mid exam)	30	X	X	X	X	X	X	
Second Exam	----							
Final Exam	50	X	X	X	X	X	X	X
Classwork	---							
Evaluation of Semester work	Projects\Reports	---						
	Research\Worksheets	---						
	Fieldwork visits	---						
	Clinical and practical performance	---						
	Portfolio	---						
	Presentations	---						
	Simulation/Modeling	---						
	Discussion	---						
	Quizzes	20	X	X	X	X	X	X
	Exercises	---						
	Interviews	---						
	Conferences	---						
Any other evaluation activities approved by the faculty committee	---							
<b>Total Marks (100%)</b>	<b>100</b>							

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

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

**Mid-term exam descriptions table\***

CLO	CLO				No. of questions/ cognitive level
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no.	Weight	Total no. of questions	Total exam mark	No. of questions per CLO	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

(e.g.: students should have a computer, internet connection, webcam, account on a specific software/platform...etc.):

Equipments that will be used:

- Computer
- Overhead projector
- Speakers

Websites that will be used for readings:

- The University of Jordan website (E-Learning).
- American Speech, Language, and Hearing Association website
- Using audio- visual materials when possible (e.g., power point, DVDs, audio tapes)

Note:

Please make sure to check the E- Learning website a day before the lecture, download and print the worksheets or the reading material uploaded for the session.

## 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 (7) 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.
- Students should work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques in a safe manner in accordance with health and safety legislation.
- Students should understand the importance of and be able to maintain confidentiality.
- Students should understand the importance of and be able to obtain informed consent.
- Students should know the limits of their practice and when to seek advice or refer to another professional

#### 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:

- Seikel, John A. (2021) Anatomy and Physiology for Speech, Language, and Hearing

### B- Recommended books, materials, and media:

- Articles, chapters from another books and websites will be provided during the semester.

## 29. Additional Information

Concerns or complaints should be expressed in the first instance to the module lecturer ; if no resolution is forthcoming , then the issue should be brought to the attention of the module coordination (for multiple sections) who will take the concerns to the module representative meeting . Thereafter, problems are dealt with by the Department Chair and if still unresolved the Dean and the ultimately the Vice President. For final complaints, there will be a committee to review grading the final exam.

- For more details on University regulations please visit :

<http://www.ju.edu.jo/rules/index.htm>

Name of the Instructor or the Course Coordinator: Mohammad Damhoureyeh	Signature: <i>Mohammad Damhoureyeh</i>	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 Prof. Kamal Al Hadidi	Signature: KAH.....	Date: 24/10/2024

