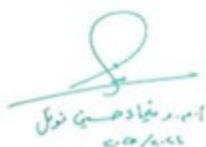


MODULE DESCRIPTION FORM

Module Information			
Module Title	Phonetics Science		Module Delivery
Module Type	Core		Theory
Module Code	MPH2205		
ECTS Credits	5 ECTS		
SWL (hr/sem)	125		
Module Level	2	Semester of Delivery	
Administering Department	MPH	College	College of Sciences
Module Leader	Ismail Mohamed Eldesoky	e-mail	ismail.m@uowa.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.
Module Tutor	Ismail Mohamed Eldesoky	e-mail	ismail.m@uowa.edu.iq
Peer Reviewer Name	Ali Nadhim	e-mail	Ali.n@uowa.edu.iq
Scientific Committee Approval Date	10-1-2025	Version Number	1.0

Relation with other Modules			
Prerequisite module	None	Semester	None
Co-requisites module	None	Semester	None



Department Head Approval




Dean of the College Approval

Module Aims, Learning Outcomes and Indicative Contents

Module Objectives	<ol style="list-style-type: none"> 1. Definition of Sound waves and General properties, The Intensity of a Sound Wave, Propagation of sound wave. 2. Propagation of sound wave, frequency of a sound wave, Reflection of Sound, Laws of Reflection of Sound. 3. Applications of Reflection of Sound, Echo, Hearing Aid, Megaphone, Sonic Boom. 4. Transmission of Sound, Diffraction of Sound Waves, Refraction of Sound. 5. Sound mechanism, Three Voice Subsystems, Key Function of the Voice Box, Key Function of the Voice Box. 6. Scattering phenomena and scattering coefficient sound and spectrograph. 7. The vocal system, Lungs, Trachea, Larynx, Pharynx. 8. Sound mechanism: Resonance, Articulation, Three Voice Subsystems, Air pressure system, Vibratory system, Resonating system, Key Function of the Voice Box, Key Components of the Voice Box 9. Laryngeal diseases and treatment 10. Structure and function of the human ear and the mechanism of hearing 11. Applications of audible waves in medicine. 12. Acoustic Traps and Doppler Effect and Shock Waves.
Module Learning Outcomes	<ol style="list-style-type: none"> 1. Know about the Sound waves and General properties. 2. Know about the Propagation, frequency, and Reflection of Sound. 3. Know the Applications of Reflection of Sound, Echo, Hearing Aid, Megaphone, and sonic boom. 4. Know about the Sound mechanism. 5. Know about the Scattering and scattering coefficient sound and spectrograph. 6. Study the vocal system, Lungs, Trachea, Larynx, and Pharynx. 7. Know about the Structure & Function of the Human Ear. 8. Applications of audible sound in medicine. 9. Study the Physiological effects of ultrasound in treatment. 10. The student is familiar with sound physics and medical audio applications.
Indicative Contents	<p>Theory Lectures Learning concepts of each theoretical lecture or groups of lectures. [SSWL= 28hrs]</p> <p>Total hrs = ΣSSWL + (Mid Exam hrs+ Final Exam hrs) Total hrs = 28 hrs + (1 hrs+ 3 hrs) = 32 hrs</p>

Learning and Teaching Strategies

Strategies	<ol style="list-style-type: none"> 1- Lecture 2- Workshops 3- Flipped classroom 4- Problem-based learning (PBL) 5- Peer teaching and collaborative learning 6- Reflective practice
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Student Workload (SWL)

Structured SWL (h/sem)	30	Structured SWL (h/w)	2
Unstructured SWL (h/sem)	92	Unstructured SWL (h/w)	6.1
Total SWL (h/sem)	122 + 3 final = 125		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	3	10%	3, 6, 9	3, 6, 9
	Assignments	2	10%	4, 8	4, 8
	Projects / Lab.	1	10%		
	Report	2	10%	9, 10	7, 10
Summative assessment	Midterm Exam	2hr	10%	7	1,2,3,7
	Final Exam	3hr	50%	16	
Total assessment			100%		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Introduction of Sound waves.
Week 2	Propagation of sound wave.
Week 3	Applications of Reflection of Sound.
Week 4	Properties of sound waves: Transmission, Diffraction, and Refraction.

Week 5	Sound mechanism.
Week 6	Scattering of sound.
Week 7	Mid. Exam
Week 8	The vocal system.
Week 9	Sound mechanism: Resonance, and Articulation.
Week 10	Laryngeal diseases and treatment.
Week 11	The Structure & Function of the Human Ear.
Week 12	Applications of audible waves in medicine (Stethoscope).
Week 13	Applications of Sound in Medicine.
Week 14	The Doppler Effect and Shock Waves.
Week 15	The nature of ultrasound waves.

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts	1- Physics in Biology and Medicine, 3rd Edition, 2003-2007, Paul Davidovits. Speech and Voice Science, 4th EDITION, 2023 Alison Behrman.	No
Recommended Texts	Physics, 8th EDITION, 2008, John D. Cutnell, Kenneth W. Johnson.	No
Websites	1- https://www.google.iq/books/edition/Laryngeal_Function_and_Voice_Disorders/dXyCDwAAQB-AJ?hl=en&gbpv=1&dq=laryngeal+diseases+and+their+treatment+pdf+free+download&printsec=frontcover 2- https://www.physicsclassroom.com/class/sound	

Grading Scheme				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	Excellent	90 - 100	Outstanding Performance
	B - Very Good	Very Good	80 - 89	Above average with some errors
	C - Good	Good	70 - 79	Sound work with notable errors
	D - Satisfactory	Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	Fail	(45-49)	More work required but credit awarded
	F – Fail	Fail	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.