



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Audiology & Speech Pathology
2013-2014
Course Syllabus

Course Information	
Course Title	Acoustics
Course Code	AS317
Credit Hours	3 Hours +0 Lab
Instructor	Dr. Mohammed Safa Nabulsi
E-mail	mmnabulsi@just.edu.jo
Course Description	
The course includes understanding of the principles of acoustics. It includes the understanding of the different physical aspects which are involved in audiology. Sound and its propagation, frequency and intensity will be discussed. Moreover, physical aspects affecting sound propagation such as resonance, reflection, diffraction, reverberation and interference and their effects will be discussed. Furthermore, special attention will be paid to waveforms, their spectrum and analysis. Sound and threshold measurements as well as sound transmission will be discussed.	

Textbook	
Title	Handbook of clinical audiology,
Author(s)	Katz J.
Publisher	Williams & Wilkins Baltimore.
Year	1994
Edition	Fourth edition.
Book Website	
Other references	

Assessment		
First Exam Theory		20
First Exam Practical		10
Second Exam Theory		20
Second Exam Practical		10
Final Exam Theory		27
Final Exam Practical		13
		100

Course Objectives	Percentage
1. Understanding the special aspects of acoustics	25
2. Understanding the different physical aspects.	20
3. Understanding of the value and the whole different aspects affecting sound and its propagation	30
4. The ability to take into consideration the different aspects affecting sound while performing audiological tests and rehabilitation.	25

Teaching & Learning Methods
• Power point presentation • Lab

Week	Title of the Lecture Theory	Lecturer
1	Introduction / Sound/ Frequency.	Dr. "Mohd Safa" Nabulsi
2	Amplitude/Intensity/ Decibels.	Dr. "Mohd Safa" Nabulsi
3	Sound measurement/ Resonance.	Dr. "Mohd Safa" Nabulsi
4	Waveform	Dr. "Mohd Safa" Nabulsi
5	<i>First Exam</i>	
6	Spectrum & analysis	Dr. "Mohd Safa" Nabulsi
7	Sound transmission	Dr. "Mohd Safa" Nabulsi
8	Reflection/ Diffraction	Dr. "Mohd Safa" Nabulsi
9	Sound fields	Dr. "Mohd Safa" Nabulsi
10	<i>Second Exam</i>	
11	Reverberation	Dr. "Mohd Safa" Nabulsi
12	Interference	Dr. "Mohd Safa" Nabulsi
13	Binaural listening	Dr. "Mohd Safa" Nabulsi
14	<i>Practical Final Exams Period</i>	
15	<i>Final Exams Period</i>	

Week	Practical	Lecturer
1	Tunning Forks	Dr. "Mohd Safa" Nabulsi
2	Sound Level Meter	Dr. "Mohd Safa" Nabulsi
3	Pure tone Audiometer	Dr. "Mohd Safa" Nabulsi
4	<i>First Exam</i>	
5	Pure tone Audiometer	Dr. "Mohd Safa" Nabulsi
6	Free Field Audiometry	Dr. "Mohd Safa" Nabulsi
7	Free Field Audiometry	Dr. "Mohd Safa" Nabulsi
8	Tympanometer	Dr. "Mohd Safa" Nabulsi
9	<i>Second Exam</i>	
10	ABR	Dr. "Mohd Safa" Nabulsi
11	ABR	Dr. "Mohd Safa" Nabulsi
12	Otoacoustic Emissions	Dr. "Mohd Safa" Nabulsi
13	Otoacoustic Emissions	Dr. "Mohd Safa" Nabulsi
14	<i>Final Exam</i>	