Course Description Form

1. Course Name: Digital Audio Processing

2. Course Code: CSMM3213

3. Semester / Year: Second Semester-2024-2025

4. Description Preparation Date: January 2025

5. Available Attendance Forms: Attendance

6. Number of Credit Hours (Total) / Number of Units (Total): 30/2 units

7. Course administrator's name (mention all, if more than one name)
Name: Dr. Inam S. Naser   Email: inam.s.naser@uotechnology.edu.iq

8. Course Objectives	
Course Objectives	• Introducing the student to digital audio processing • Dealing with the digital audio signal and its applications.

9. Teaching and Learning Strategies	
Strategy	Strategy is represented by a set of goals like: • Know the facts related to the topic of digital audio processing • Know the terminology of digital audio processing • The student explains the concepts and techniques of digital audio processing • The student remembers, describes and enumerates these concepts after graduating This will be through using teaching and learning methods, such as: Methodological books, resources (internet and library), lectures reinforced with illustrative examples. Theoretical lectures, practical tasks, using modern devices to present practical ideas to students (electronic board, data show).

		10. Course Structure			
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	2	1,3,5,6,7	Introduction to Multimedia	Attended lectures	Attendance+ Answering questions
2	2	1,3,5,6,7	Multimedia applications and requirements.	Attended lectures	Attendance+ Answering questions
3	2	1,3,5,6,7	Synthetic sounds	Attended lectures	Attendance+ Answering questions
4	2	1,3,5,6,7	**Quiz 1**	Answering questions	Attendance
5	2	1,3,5,6,7	Introduction to MIDI (Mutual Instrument Digital interface)	Attended lectures	Attendance+ Answering questions
6	2	1,3,5,6,7	Audio signal, Sampling rate	Attended lectures	Attendance+ Answering questions
7	2	1,3,5,6,7	**Mid exam**	Answering questions	Attendance
8	2	1,3,5,6,7	Nyquist theorem	Attended lectures	Attendance
9	2	1,3,5,6,7	Audio modulation (amplitude modulation)	Attended lectures	Attendance+ Answering questions
10	2	1,3,5,6,7	Audio modulation (frequency modulation)	Attended lectures	Attendance+ Answering questions
11	2	1,3,5,6,7	**Quiz 2**	Answering questions	Attendance
12	2	1,3,5,6,7	Audio compression	Attended lectures	Attendance+ Answering Questions
13	2	1,3,5,6,7	Digital rights management	Attended lectures	Attendance+ Answering Questions
14	2	1,3,5,6,7	**Review**	Attended lectures	Attendance+ Answering Questions
15	2	1,3,5,6,7	**Final Exam**	Answering	Attendance

				questions	

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	None
Main references (sources)	Lectures
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	