Department	International College of Liberal Arts		
Semester	Spring 2023	Year Offered (Odd/Even/Every Year)	Every Year
Course Number	MUSC120		
Course Title	Fundamentals of Sound and Music		
Prerequisites	None		
Course Instructor	BLOW Michael	Year Available (Grade Level)	1
Subject Area	Interdisciplinary Arts: Music	Number of Credits	3
Class Style	Lecture	Class Methods	Face to face

(NOTE 1) Class Methods are subject to change

(NOTE 2) Depending on the class size and the capacity of the facility, we may not be able to accommodate all students who wish to register for the course"

Course Description	This course focuses on understanding how sound works, and how we control it to make music. The course is delivered in three sections; the first covers acoustics: sound waves, harmonics, timbre, acoustic effects such as resonance, reflection and diffraction, and psychoacoustics. The second explores basic music theory: tunings, scales, intervals, chords and rhythm. The final section is a practical project in sound design, that students develop with tutorial support. The course is 100 level but is fairly technical and includes a little math. It is a foundational course for music studies at iCLA and is recommended for anyone who is interested in following sound related careers such as audio engineers, musicians, and media/sound artists. The course is delivered through lectures, readings, discussion, tutorials and presentations. DP1: To Value Knowledge Having high oral and written communication skills to be able to both comprehend and transfer knowledge DP2: To Be Able to Adapt to a Changing World Having critical, creative, problem-solving, intercultural skills, global and independent mindset to adopt to a changing world
Class plan based on course evaluation from previous academic year	Revisit some of the more technical aspects to make them more easy to understand.
Course related to the instructor's practical experience (Summary of experience)	Yes. Mike Blow has a great deal of experience working in sound, music and engineering as an artist, technologist and teacher, including playing and recording music, sound art installations, and musical instrument design and construction.
Learning Goals	At the end of this course students should be able to: (i) Demonstrate an understanding of acoustics and the physical qualities of sound such as amplitude, frequency and phase; (ii) Use simple equations to calculate quantities such as decibels and fundamentals; (iii) apply basic music theory (iv) Create sounds to order using sound design techniques and tools (v) become more reflective, curious, and open-minded (vi) be able to share ideas and construct meanings together with others

iCLA Diploma Policy	DP1／DP2

iCLA Diploma Policy

(DP1) To Value Knowledge - Having high oral and written communication skills to be able to both comprehend and transfer knowledge

(DP2) To Be Able to Adapt to a Changing World - Having critical, creative, problem-solving, intercultural skills, global and independent mindset to adopt to a changing world

(DP3) To Believe in Collaboration - Having a disposition to work effectively and inclusively in teams

(DP4) To Act from a Sense of Personal and Social Responsibility - Having good ethical and moral values to make positive impacts in the world

Active Learning Methods	Practical project in sound design, with reference to film audio and music concrete

Use of ICT in Class	Audio editing software
Use of ICT outside Class	Audio capture using phone apps
Expected study hours outside class	All students in this course should preview and review the materials thoroughly and spend about 2 hours each week to do so.
Feedback Methods	Tests: scores, completed answer sheets, individual explanations and help if necessary. Project: verbal feedback during tutorials and written feedback on submission if requested.

Grading Criteria		
Grading Methods	Grading Weights	Grading Content
Test Acoustics	20%	
Test Music Theory	20%	
Sound Design Project	60%	

Required Textbook(s)	If you have not studied music theory before, please buy Schroeder: Hal Leonard Pocket Music Theory (2002). Available in print and e-book versions from Amazon, Google play and online book retailers A scientific calculator. You can use your phone but from experience, students often make mistakes - and lose marks - using phone calculators. I'd recommend a casio fx 375 model - cheap, easy to use, and plentiful secondhand.
Other Reading Materials/URL	Palmer: Piano Adult All-In-One Course (includes music theory, in library) Benade: Fundamentals of Musical Acoustics (in library) Deutsch: The Psychology of Music (in library) Cook: Music, Cognition and Computerized Sound (in library) Gibbs: Fundamentals of Sonic Art and Sound Design (AVA, 2007): A broad overview of sound art and design practice Chion: Audio Vision (in library): the bible of relationships between image and sound
Plagiarism Policy	Plagiarism is the dishonest presentation of the work of others as if it were one's own. This includes material copied or paraphrased from online sources, or generated by AI. Duplicate submission is also treated as plagiarism. Depending on the nature of the plagiarism you may fail the assignment or the course. Repeated act of plagiarism will be reported to the University which may apply additional penalties.
Other Additional Notes	This syllabus is indicative only, and may change due to external circumstances or pedagogical decisions by the instructor

(NOTE 3) Class schedule is subject to change

Class Schedule	
Class Number	Content
Class 1	Introduction
Class 2	Introduction
Class 3	The Physics of Sound
Class 4	Waveforms and Phase
Class 5	Gain and Decibels
Class 6	Frequency
Class 7	Acoustic effects
Class 8	Psychoacoustic Effects
Class 9	Analog and Digital Sound
Class 10	Practice Test - Acoustics
Class 11	Test - Acoustics
Class 12	Test review
Class 13	Musical Instruments
Class 14	Temperament
Class 15	Scales

Class 16	Scales 2
Class 17	Chords
Class 18	Chord Progressions and Cadences
Class 19	Rhythm
Class 20	Test 2: Music Theory
Class 21	Sound Design Introduction and Project Brief
Class 22	The Psychology of Sounds
Class 23	Field Recording: Collecting Sounds
Class 24	Synthesizers: Creating Sounds
Class 25	Sound Design with Audacity
Class 26	Sound Design with Audacity
Class 27	Sound Design with Audacity
Class 28	Sound Design with Audacity
Class 29	Project Tutorials
Class 30	Project Tutorials