

Department	International College of Liberal Arts		
Semester	Fall 2025	Year Offered (Odd/Even/Every Year)	Every Year
Course Number	MUSC251		
Course Title	Music Technology		
Prerequisites	None		
Course Instructor	BLOW Michael	Year Available (Grade Level)	2
Subject Area	Interdisciplinary Arts: Music	Number of Credits	3
Class Style	Lecture	Language of instruction	English

(NOTE 1) 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	<p>This course covers the history, theory and practical use of music technology. We explore acoustic and electric instruments, pickups and amplification, and electronic music technologies such as synthesizers, drum machines and samplers. Through lectures, musical examples and practical projects we will take a deep dive into different synthesis techniques and learn the basics of digital audio workstation software.</p> <p>The course is delivered through lectures, demonstrations, and practicals.</p>
Class plan based on course evaluation from previous academic year	<p>Added some more contextual information (music tech example tracks session, and some material on studio recording and playback methods).</p> <p>Reworked course structure to mainly have one lecture and one practical each week.</p> <p>Added DP2 to reflect project-based assessments.</p>
Course related to the instructor's practical experience (Summary of experience)	<p>Prof Blow has a background in both music and electronics. He has been studying, using and modifying electric instruments, synthesizers, drum machines and music software since university (quite a long time ago).</p>
Learning Goals	<p>At the end of this course students should be able to:</p> <ul style="list-style-type: none"> (i) Appreciate the historical development and impact of technology in music production and recording (ii) Theoretically understand the way sound is generated in a variety of acoustic and electric instruments and synthesis techniques; (iii) Practically create their own music technology project using music software and DAWs (iv) develop and express ideas effectively (v) become more reflective, curious, and open-minded.

iCLA Diploma Policy	DP1/DP2/DP3
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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	Problem-Based Learning/Discussion, Debate/Group Work/Presentation/Workshop, Fieldwork			
More details/supplemental information on Active Learning Methods	Practical work building synthesizers and creating audio recording projects. Group work in final project.			
Use of ICT	Projector, audio system, audio software and hardware			
Contents of class preparation and review	All students in this course should preview and review the materials thoroughly and spend about 5 hours per week to do so. In addition students are encouraged to practically explore the techniques and subjects covered in this course in between classes, and will need to spend time outside of class working on practical projects. The music studio is available for students on campus. Use the material in the course as a starting point for your own explorations.	Hours expected to be spent preparing for class (hours per week)	3 hours	Hours expected to be spent on class review (hours per week)
Feedback Methods	Project and workbooks: verbal feedback from instructor during development and written feedback on completion			

Grading Criteria		
Grading Methods	Grading Weights	Grading Content
Music Tech History / Theory Test	20%	In-class test
Practical Synthesis Test	30%	In-class test
Project Music Technology Performance	50%	Performance, report

Required Textbook(s)	Students should bring a laptop capable of running VCV rack and DAW audio software (Reaper, Garage Band, Logic, FL, Ableton or similar). If in doubt please check during the introduction sessions. Phones and tablets are not suitable platforms for the practical test. There are no required texts, but students are advised to explore the resources listed in the next section.
Other Reading Materials/URL	Recommended reading: Cook: Music, Cognition and Computerized Sound (in YGU library): a detailed but accessible introduction to psychoacoustics and synthesis Roads: The Computer Music Tutorial (in YGU library) Collins: Handmade Electronic Music (in YGU library): DIY music making using simple electronics, highly recommended Huber: Modern Recording Techniques (in YGU library) Resources in LAC: Guitar Rigs, Guitar Effects Pedals, Guitar Amps (all by Hunter) Web: Sound on Sound magazine, FACT mag

Plagiarism Policy	Plagiarism is the dishonest presentation of the work of others as if it were one's own. Duplicate submission is also treated as plagiarism. Depending on nature of plagiarism you may fail the assignment or the course. Repeated act of plagiarism will be reported to the University which may apply additional penalties. Direct copying from online sources or another student may result in a 0 grade for that assignment.
Other Additional Notes (Outline crucial policies and info not mentioned above)	1) A Note on A.I. It is my observation that A.I. writes terrible papers. They are typically full of complicated words but do not contain much information, they often include chronic repetition of information from one paragraph to the next, and they do not include proper referencing. Papers on this course will be strictly graded according to academic standards. It is my strong recommendation that, if you use A.I., you use it for research only and any writing that you submit is hand-written by yourself. An insightful written piece containing your own thoughts and observations, even if the spelling or grammar is not perfect, will earn you a better grade than the superficial nonsense that A.I. tends to produce. 2) Please note this syllabus is indicative only and may change due to external events or for pedagogical reasons

(NOTE 2) Class schedule is subject to change

Class Schedule	
Class Number	Content
Class 1	Lecture: Introduction
Class 2	Lecture: Introduction
Class 3	Lecture: Music Technology Example Tracks Analysis
Class 4	Lecture: Synthesis Theory: Oscillators
Class 5	Lecture: Acoustic and Electric Instruments
Class 6	Lecture: Synthesis Theory: Filters and Envelopes
Class 7	Lecture: History of Music Technology 1: Synthesizers and Samplers
Class 8	Practical: VCV Rack Introduction and Subtractive Synthesis
Class 9	Lecture: History of Music Technology 2: Sequencers, Drum Machines, MIDI
Class 10	Practical: Additive Synthesis

Class 11	Lecture: Effects
Class 12	Practical: Extended VCV Ideas
Class 13	VCV Project Tutorial
Class 14	VCV Project Tutorial
Class 15	History / Theory Test Practice
Class 16	History / Theory Test
Class 17	Lecture: Modern Trends 1: DAWs and Plugins
Class 18	Practical: Main Project Brief and Introduction to Ableton
Class 19	Lecture: Modern Trends 2: Retrofuturism
Class 20	Practical: Working with Audio in a DAW
Class 21	Lecture: Studio Practice
Class 22	Practical: Synth plugins and MIDI sequencing in a DAW
Class 23	Workshop: Project Crit
Class 24	Practical: Sample Slicing in a DAW

Class 25	Lecture: Playback media
Class 26	Practical: Historical Playback Media Comparison
Class 27	Project Tutorial
Class 28	Project Tutorial
Class 29	Project Presentations
Class 30	Project Presentations