



# MUS 302

## Sound, Image and Interactive Media

S2 Day 2014

*Dept of Media, Music & Cultural Studies*

### Contents

---

|   |    |
|---|----|
| <a href="#"><u>General Information</u></a>            | 2  |
| <a href="#"><u>Learning Outcomes</u></a>              | 2  |
| <a href="#"><u>General Assessment Information</u></a> | 3  |
| <a href="#"><u>Assessment Tasks</u></a>               | 3  |
| <a href="#"><u>Delivery and Resources</u></a>         | 8  |
| <a href="#"><u>Unit Schedule</u></a>                  | 9  |
| <a href="#"><u>Policies and Procedures</u></a>        | 10 |
| <a href="#"><u>Graduate Capabilities</u></a>          | 11 |
| <a href="#"><u>Changes from Previous Offering</u></a> | 16 |
| <a href="#"><u>Changes since First Published</u></a>  | 16 |

---

#### **Disclaimer**

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

## General Information

Unit convenor and teaching staff

Unit Convenor

Alex Mesker

[alex.mesker@mq.edu.au](mailto:alex.mesker@mq.edu.au)

Contact via [alex.mesker@mq.edu.au](mailto:alex.mesker@mq.edu.au)

193K Y3A

Email for appointment

Credit points

3

Prerequisites

39cp

Corequisites

Co-badged status

Unit description

This unit is unit designed for students and digital artists interested in computer-based audiovisual performance. The unit aims at extending production skills gained in music and media production streams, and attempts to build an adaptable skill set for creating customised digital performance and interactive works.

This unit will cover a range of hybrid new media contemporary technologies including MIDI, audio and synthesis, graphics and video, 3D, and gestural and tactile control. It covers programming fundamentals with Max, a graphical programming environment for new media artists.

The core of the unit will be the creation of new media production and performance works, including computer-mediated music and visual art projects.

Skills gained in this unit have relevance to areas including sonic and visual design, interaction design, game sound, and broad areas of computer-based production and performance. This unit assumes no prior knowledge in Max.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

## Learning Outcomes

On successful completion of this unit, you will be able to:

Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.

Demonstrate a knowledge, understanding and application of course concepts.

Develop information and technological literacy, as well as an understanding of how to manipulate various media forms.

Illustrate competence with material/programs taught (Max/MSP/Jitter).

Develop the ability to apply theoretical and technological concepts to creative works.

Synthesise creative concepts through aural and visual media forms.

Develop problem-solving skills.

## General Assessment Information

With the exception of written work, all work must be digitally submitted to the Music Server as outlined during class time.

While media files can be sourced from others' work, patches created in Max/MSP/Jitter should be original works, and any 'borrowed code' should be referenced as you would in a formal written assignment. Submission of work that is primarily copied from resources outside of content provided in the unit is subject to the same [Academic Honesty Policy](#) as written works.

## Additional information

MMCCS website [https://www.mq.edu.au/about\\_us/faculties\\_and\\_departments/faculty\\_of\\_arts/departments\\_of\\_media\\_music\\_communication\\_and\\_cultural\\_studies/](https://www.mq.edu.au/about_us/faculties_and_departments/faculty_of_arts/departments_of_media_music_communication_and_cultural_studies/)

MMCCS Session Re-mark Application <http://www.mq.edu.au/pubstatic/public/download/?id=167914>

Information is correct at the time of publication

## Assessment Tasks

| Name  | Weighting | Due           |
|---|-----------|---------------|
| <a href="#">Image Manipulation System</a>   | 30%       | Week 8 Class  |
| <a href="#">Creative Brief</a>              | 10%       | Week 9 Class  |
| <a href="#">Interactive Multimedia Work</a> | 30%       | Week 13 Class |
| <a href="#">Class Participation</a>         | 10%       | Ongoing       |
| <a href="#">Workshop Fundamentals</a>       | 20%       | Weeks 2–5     |

### Image Manipulation System

Due: **Week 8 Class**

Weighting: **30%**

Students will create a basic Max/Jitter patch that allows a performer (ie. you) to load images or video, and manipulate live (eg. 'cut' between parts, change visual effects etc.). An interface of your choice should be mapped to act as a controller for your system.

A brief demonstration of your patch's functionality and usage will occur in Week 8 tutorial. A pass mark for this assessment will be granted for a demonstration of technical proficiency, and intention behind and understanding of the function of your patch.

Students are encouraged to incorporate other forms of visual modification and control in their patches.

After demonstration, submit your patch to the assignments' dropbox on the server in a folder containing all your patches and media files, named LASTNAME\_FIRSTNAME\_Assessment2.

## Marking Criteria

Marks will be awarded for:

- Satisfactorily completing project objectives
- Demonstration of understanding
- Suitable conversion and formatting of visual/aural media forms
- Effective forms of control over the visuals
- Clarity, quality and ingenuity (orderly and easy-to-read patching layout, concise and well structured patching) of your patch

On successful completion you will be able to:

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Demonstrate a knowledge, understanding and application of course concepts.
- Develop information and technological literacy, as well as an understanding of how to manipulate various media forms.
- Illustrate competence with material/programs taught (Max/MSP/Jitter).
- Develop the ability to apply theoretical and technological concepts to creative works.
- Synthesise creative concepts through aural and visual media forms.
- Develop problem-solving skills.

## Creative Brief

Due: **Week 9 Class**

Weighting: **10%**

Students must write a 500-word brief outlining their intended construction of a performable presentation/installation using Max. By now, students should have a firm understanding of the

creative possibilities of Max, and should address technical concepts such as what the performance will entail, how the patch will function, how it will create/control visual/aural media, and how/whether special control interfaces will be used. Students will reflect on this written creative brief when demonstrating their completed work in Week 13.

The creative brief can be given straight to me in class time.

## Marking Criteria

Marks will be awarded for:

- Outlining objectives for your creative work
- Evidence of understanding of how it could be realised
- Outlining steps to achieve this given existing levels of knowledge
- Clarity, quality and ingenuity of ideas
- Quality of writing

On successful completion you will be able to:

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Demonstrate a knowledge, understanding and application of course concepts.
- Develop the ability to apply theoretical and technological concepts to creative works.
- Synthesise creative concepts through aural and visual media forms.

## Interactive Multimedia Work

Due: **Week 13 Class**

Weighting: **30%**

Students must design and create an interactive sound/music/image/video based installation/performance work that employs elements of new media performance and demonstrates knowledge learnt throughout the course. The installation will be performed in Week 13 during 302 class time and should be accompanied by a brief technical presentation outlining aims and outcomes.

This is a summative assessment that should build on the Creative Brief and incorporate techniques and concepts practiced and discussed throughout the course. A pass mark for this assessment will be granted for a demonstration of technical proficiency and the ability to successfully realise a creative work in a multimedia form, integrating image and sound.

Group work (of two students) is welcomed in this assignment, and individual contribution to the final product will be monitored in the weeks preceding the final performance.

**Note:** If this patch is based on a previously submitted Image Modification System, it should show a distinct progression from and marked difference between previously demonstrated work.

As well as presenting your work, please submit a copy to the assignments' dropbox on the server as a folder containing all of your patches and media files entitled LASTNAME\_FIRSTNAME\_FinalWork.

## Marking Criteria

Marks will be awarded for:

- Construction and demonstration of a coherent performable art/work
- Evidence of understanding of audiovisual performance and control
- Suitable control inputs and interaction with media forms
- Quality, achievability and realisation of creative ideas
- Effective engagement with audiovisual media forms through gestural inputs and computer-based controls

On successful completion you will be able to:

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Demonstrate a knowledge, understanding and application of course concepts.
- Develop information and technological literacy, as well as an understanding of how to manipulate various media forms.
- Illustrate competence with material/programs taught (Max/MSP/Jitter).
- Develop the ability to apply theoretical and technological concepts to creative works.
- Synthesise creative concepts through aural and visual media forms.
- Develop problem-solving skills.

## Class Participation

Due: **Ongoing**

Weighting: **10%**

At the end of the unit, marks will be awarded for tutorial participation and how students engaged with course material in classes.

Asking questions and demonstrating critical thinking through engagement with class discussions are great ways to participate in tutorials.

## Marking Criteria

Marks will be awarded for:

- Engaging with class topics/discussion
- Contributing to the group learning environment
- Engaging with course material and tutorial tasks

On successful completion you will be able to:

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Demonstrate a knowledge, understanding and application of course concepts.
- Illustrate competence with material/programs taught (Max/MSP/Jitter).
- Develop problem-solving skills.

## Workshop Fundamentals

Due: **Weeks 2–5**

Weighting: **20%**

Students are required to complete tutorial 'worksheets' in Max, and create micro-projects that demonstrate their understanding of fundamental Max/MSP/Jitter concepts. These worksheets will give students the skillset to develop their own creative works in Max.

While a number of these might deal with musical concepts, your demonstrated familiarity with Max and analytical approach is what is the main focus of these worksheets. Students' engagement with the worksheets will be formatively assessed during each tutorial. Feedback will consist of discussion with the tutor.

Worksheets will be submitted to assignments' dropbox the server, and should be placed in a folder named LASTNAME\_FIRSTNAME\_MUS302\_Worksheet1.

## Marking Criteria

Marks will be awarded for:

- Satisfactorily completing tasks
- Addressing task requirements correctly
- Demonstration of understanding
- Clarity, quality and ingenuity (orderly and easy-to-read patching layout, concise and well structured patching)

On successful completion you will be able to:

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Demonstrate a knowledge, understanding and application of course concepts.
- Develop information and technological literacy, as well as an understanding of how to manipulate various media forms.
- Illustrate competence with material/programs taught (Max/MSP/Jitter).
- Develop problem-solving skills.

## Delivery and Resources

### Lecture time:

- Wednesday 9am, Y3A 223

**Please note:** Lectures attendance is compulsory as tutorial time is heavily dependent on lecture content.

### Tutorial times:

- Wednesday 10am – 12pm, Y3A 223
- Wednesday 12pm – 2pm, Y3A 223
- Thursday 11am – 1pm, Y3A 223
- Thursday 1pm – 3pm, Y3A 223

As MUS 302 is a practical unit, students are expected to attend both lectures and practical tutorial workshops. Workshops are designed to give students time to develop practice-based learning with instructional support. Prior knowledge of Max is not a requirement, however general computer literacy skills are assumed (creating files/folders, copying files etc).

Students are required to bring headphones to class each week, and to source/create their own media (music, sound, images, film) for assignments, assessments, and performances. Each student has access to the music server, but can also bring thumb drives or portable drives (**not** formatted as NTFS) to class.

Non-attendance to more than two lectures/tutorials without medical certification will result in a zero grade for participation in the unit.

## Readings

Readings and extra curricular tasks will be disseminated via iLearn.

### Core-readings and interactive exercises:

As this course is computer-focussed and practical in nature, a number of interactive readings and examples will be available in the Max 6 Help and Documentation and the in-built Max/MSP/Jitter tutorials within Max.

### Optional Readings:

Manzo, VJ (2011) Max/MSP/Jitter for Music: A Practical Guide to Developing Interactive Music Systems for Education and More

Colosanto, F (2012) Max 6: Interface

... both available via [http://cycling74.com/wiki/index.php?title=Max\\_Documentation\\_and\\_Resources](http://cycling74.com/wiki/index.php?title=Max_Documentation_and_Resources) (please discuss any areas you wish to read about in more detail with me first)



## Unit Schedule

### Week 1

- Course introduction.
- Overview and assignment guidelines. Past projects.

### Week 2

- Fundamentals of Max/MSP/Jitter 1: Message Types, Programmatic Flow
- Tutorial Task: Max Worksheet 1
- **Assessment 1a:** Max Worksheet 1

### Week 3

- Fundamentals of Max/MSP/Jitter 2: introduction to MIDI
- Tutorial Task: Max Worksheet 2
- **Assessment 1b:** Max Worksheet 2

### Week 4

- Fundamentals of Max/MSP/Jitter 3: Basic Input Controls (keys/mouse)
- Tutorial Task: Max Worksheet 3
- **Assessment 1c:** Max Worksheet 3

### Week 5

- Fundamentals of Max/MSP/Jitter 4: Musical Control
- Tutorial Task: Max Worksheet 4
- **Assessment 1d:** Max Worksheet 4

### Week 6

- Max: Working with Visuals 1.
- Introduction to video.
- Manipulation of video playback.

### Week 7

- Max: Working with Visuals 2.
- Interfaces.
- Constructing controller interfaces for controlling visual performance.

## Week 8

- Max: Working with Audio
- Introduction to Audio. Synthesis and manipulation of sound playback.
- **Assessment 2:** Basic Video/Image Manipulation System

## Week 9

- Max: Working with Audio 2.
- Human Interface Devices.
- Constructing controller interfaces for sonic performance.
- **Assessment 3:** Creative Brief for Live Performance System/Final Work.

## Week 10

- Audiovisual performance
- Integrating visuals and audio.

## Week 11

- Max: Tying It All Together
- Working with semi-autonomous agents for live performance.

## Week 12

- Free Lab Time

## Week 13

- Max Performances
- **Assessment 4:** Interactive Multimedia Work in Max/MSP/Jitter performances in tutorial

Note: Late assignments without medical certification will incur a 10% penalty per day.

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](#). Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy [http://mq.edu.au/policy/docs/academic\\_honesty/policy.html](http://mq.edu.au/policy/docs/academic_honesty/policy.html)

Assessment Policy <http://mq.edu.au/policy/docs/assessment/policy.html>

Grading Policy <http://mq.edu.au/policy/docs/grading/policy.html>

Grade Appeal Policy <http://mq.edu.au/policy/docs/gradeappeal/policy.html>

Grievance Management Policy [http://mq.edu.au/policy/docs/grievance\\_management/policy.html](http://mq.edu.au/policy/docs/grievance_management/policy.html)

Disruption to Studies Policy [http://www.mq.edu.au/policy/docs/disruption\\_studies/policy.html](http://www.mq.edu.au/policy/docs/disruption_studies/policy.html) *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the [Learning and Teaching Category](#) of Policy Central.

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: [https://students.mq.edu.au/support/student\\_conduct/](https://students.mq.edu.au/support/student_conduct/)

## Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

## Learning Skills

Learning Skills ([mq.edu.au/learningskills](http://mq.edu.au/learningskills)) provides academic writing resources and study strategies to improve your marks and take control of your study.

- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module for Students](#)
- [Ask a Learning Adviser](#)

## Student Services and Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at [ask.mq.edu.au](http://ask.mq.edu.au)

## IT Help

For help with University computer systems and technology, visit <http://informatics.mq.edu.au/help/>.

When using the University's IT, you must adhere to the [Acceptable Use Policy](#). The policy applies to all who connect to the MQ network including students.

## Graduate Capabilities

### Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to

demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

### **Learning outcomes**

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Demonstrate a knowledge, understanding and application of course concepts.
- Develop the ability to apply theoretical and technological concepts to creative works.
- Synthesise creative concepts through aural and visual media forms.
- Develop problem-solving skills.

### **Assessment tasks**

- Image Manipulation System
- Creative Brief

## **Commitment to Continuous Learning**

Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue knowledge for its own sake. They will continue to pursue learning in their careers and as they participate in the world. They will be capable of reflecting on their experiences and relationships with others and the environment, learning from them, and growing - personally, professionally and socially.

This graduate capability is supported by:

### **Learning outcomes**

- Develop information and technological literacy, as well as an understanding of how to manipulate various media forms.
- Illustrate competence with material/programs taught (Max/MSP/Jitter).
- Develop the ability to apply theoretical and technological concepts to creative works.
- Develop problem-solving skills.

### **Assessment tasks**

- Interactive Multimedia Work
- Class Participation

## **Discipline Specific Knowledge and Skills**

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them

competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

## **Learning outcomes**

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Demonstrate a knowledge, understanding and application of course concepts.
- Develop information and technological literacy, as well as an understanding of how to manipulate various media forms.
- Illustrate competence with material/programs taught (Max/MSP/Jitter).
- Develop the ability to apply theoretical and technological concepts to creative works.
- Synthesise creative concepts through aural and visual media forms.
- Develop problem-solving skills.

## **Assessment tasks**

- Image Manipulation System
- Creative Brief
- Interactive Multimedia Work
- Workshop Fundamentals

## **Critical, Analytical and Integrative Thinking**

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

## **Learning outcomes**

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Demonstrate a knowledge, understanding and application of course concepts.
- Develop information and technological literacy, as well as an understanding of how to manipulate various media forms.
- Illustrate competence with material/programs taught (Max/MSP/Jitter).

- Develop the ability to apply theoretical and technological concepts to creative works.
- Synthesise creative concepts through aural and visual media forms.
- Develop problem-solving skills.

## **Assessment tasks**

- Image Manipulation System
- Creative Brief
- Interactive Multimedia Work
- Class Participation
- Workshop Fundamentals

## **Problem Solving and Research Capability**

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

## **Learning outcomes**

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Demonstrate a knowledge, understanding and application of course concepts.
- Develop information and technological literacy, as well as an understanding of how to manipulate various media forms.
- Illustrate competence with material/programs taught (Max/MSP/Jitter).
- Develop the ability to apply theoretical and technological concepts to creative works.
- Synthesise creative concepts through aural and visual media forms.
- Develop problem-solving skills.

## **Assessment tasks**

- Image Manipulation System
- Creative Brief
- Interactive Multimedia Work
- Class Participation
- Workshop Fundamentals

## Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:

### Learning outcomes

- Examine and critically analyse the work of others and be able to understand, deconstruct, and apply these skills to their own work.
- Develop the ability to apply theoretical and technological concepts to creative works.
- Synthesise creative concepts through aural and visual media forms.
- Develop problem-solving skills.

### Assessment tasks

- Image Manipulation System
- Creative Brief
- Interactive Multimedia Work
- Workshop Fundamentals

## Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

### Learning outcomes

- Develop information and technological literacy, as well as an understanding of how to manipulate various media forms.
- Illustrate competence with material/programs taught (Max/MSP/Jitter).
- Develop the ability to apply theoretical and technological concepts to creative works.
- Synthesise creative concepts through aural and visual media forms.

### Assessment tasks

- Image Manipulation System
- Creative Brief
- Interactive Multimedia Work

- Class Participation

## Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:

### Learning outcome

- Develop the ability to apply theoretical and technological concepts to creative works.

## Changes from Previous Offering

Based on past student feedback, more hands-on lab time has been granted.

## Changes since First Published

| Date       | Description                  |
|------------|------------------------------|
| 28/02/2014 | The Description was updated. |