SCHOOL OF MEDIA ARTS

SOMA2607

MULTIMEDIA AUTHORING 1

Semester 1

CONTENTS

Course staff 3
Course Information 3
Graduate Attributes Developed In This Course 3
Approach to Learning and Teaching 4
Teaching Strategies 4
Assessment 4
Breakdown of Marks 5
Backups 5
Participation 5
Late Submission 6
1. Extensions 6
2. Special Consideration 6
Equity and Diversity 6
Academic honesty and plagiarism 6
Computing Requirements 8
Safety Information 8
Emergencies and evacuation 8
Students OHS responsibilities 9
First aid information 9
Electrical safety 9
Workplace safety and hazardous substances 9
Public Liability 9
Course schedule 9
Resources for students 11
Electronic resources 11
Image/Search Engines 12
Electronic Journals 12
Opinion & Link Sites 12
Interactive Content Online 12
E-Books 13
Interactive Design, Production and Tutorial Resources - Flash ..... **Error! Bookmark not defined.**
Books on new media/interactive design 13
Technical/tutorial books 15
Macromedia Flash books ..... **Error! Bookmark not defined.**
Continual course improvement 15
Administrative Matters 15

Course staff

Course Coordinator:	Petra Gemeinboeck
Tutors:	
Room	CB05
Phone	
Email	
Consultation times	Course Coordinator:

Course Information

Units of Credit:	6
Teaching times:	

Contact hours per week:	3
Parallel Teaching:	SOMA1681 and 9725 will be taught in parallel.
Course Aims:	Multimedia Authoring 1 is an introduction to the approaches and processes of interactive media. The course provides a platform to combine the media of sound, text, animation, still and moving image within basic interactive structures.

Graduate Attributes Developed In This Course

Graduate Attributes are the skills, qualities, understandings and attributes a university agrees a student will develop during their program of study. By participating in this course you will be able to develop:

- The ability to use new technologies to enhance communication in a range of ways by gaining an understanding of the nature of interactivity and applying this knowledge in your assessments.
- Competency in technologies appropriate to digital media practice.
- Skills required for self-directed and reflective learning, and the ability to conduct appropriate research.
- The ability to articulate the expressive demands of your practice in a creative manner.
- The ability to critically and constructively resolve problems and issues in your practice.
- A confidence in your discipline and an ability to be adaptive in a range of contexts.
- Openness to ideas and experiences, and a heightened understanding of your own creative potential, and ways of exploring and applying it.

Approach to Learning and Teaching

Tutorials will focus mainly on teaching students practical skills in creating basic interactive works. Tutors will demonstrate concepts and tasks. Students will be provided with relevant written material and practical tasks to complete for class in order to reinforce the demonstration material. This written material & tasks will also act as a reference for students when not in class.

Lectures aim to educate students about aspects of interactive media and display a variety of historical and contemporary interactive work, in order for them to gain knowledge of the applications and concepts of interactive media. The aim is for them to be able to use this knowledge to inform their practical work.

Guest lectures are also being included as part of the lecture series, with professionals from art and design fields being included.

Teaching Strategies

By integrating theory and design practice in the lectures, tutorials, and assignments this course aims to provide an introductory immersion in the exploratory and iterative nature of interactive media. The lectures provide an exposure to both old and new interactive media. In tutorials you will be shown how to plan and structure your projects, explore interactive ideas as well as being introduced to simple programming structures. The course utilizes multiple software programs, however the focus is on the use of the Processing development environment to develop interactive scenarios with different forms of media.

*Please note that the expectation of time in this course is more than contact hours. The University has expectations of a total load of 25 – 30 hours per unit of credit. This means that you should spend no less than 8-9 hours per week on average on class work in addition to your timetabled hours.

Assessment

A project will be set, consisting of four project stages: (1) research, (2) concept, (3) realization, (4) documentation; each one is allocated the marks and requirements as detailed in the weekly plan on the following pages. You will also need to complete a journal and submit this as part of your coursework. You will be expected to show evidence of achieving the courses learning aims as well as attendance and participation.

To qualify for a passing grade you must complete all set work, which is to be submitted on time. Where absences in excess of three (3) classes occur, you may be given a fail grade. You must be punctual and participate in all class activities.

Each project will be given to you in a separate briefing document. Make sure you read the document thoroughly and if you have any questions ask your tutor. A common cause of students failing or not achieving high marks is often that they have failed to read the brief.

Detailed assessment criteria will be included in the briefing documents, but usually you will be assessed on the following criteria:

1. Originality of your idea and thoroughness of research and process.
2. Aesthetic experience: audio & visual execution (how it looks & sounds).

3. Interactive experience: to which degree it can engage the participants.
4. Technical competence – your programming, structure and delivery.
5. Overall presentation and copyright usage.

Breakdown of Marks

The course revolves around the development of an interactive work that is structured through a number of project stages. Assessment also includes a learning journal and participation in class. The breakdown of marks is as following:

Assessment Item	Week to hand in	Percentage
Project research	*to be announced*	15%
Project concept (pitch)	*to be announced*	15%
Project realization	*to be announced*	40%
Documentation & Journal	*to be announced*	20%
Participation	throughout the semester	10%
Total		100%

Backups

IT IS YOUR RESPONSIBILITY TO BACK UP ALL YOUR WORK! You will need to purchase some CD-Rs OR DVDs to store files generated during the semester. The machines in the labs no longer have Zip drives but now have CD-burners or DVD burners and Toast software with which to burn CDs and DVDs. You are advised to purchase your own external Firewire drive if you intend to work extensively with digital media.

REMEMBER: A hard drive is not a backup – CDs, DVDs or tapes are the only safe option. You should make two copies and keep them in separate places. Diligently backup all work that is important to you at regular intervals. Try to develop a system where you back-up all your work, correctly labeled and week-by-week, or more often if you are producing a lot of work.

Extensions of time for assignments will not be granted if you lose work through software/ hardware /operator error or viruses on personal machines.

Participation

Participation includes, your willingness to interact and engage in learning, as well as the presentation of your work during class for Project Stages 1-4 on their respective due dates.

In order for large lab-based classes to function properly, it is imperative that the time available is used effectively. People arriving late, taking extra break time, surfing the web, sending/reading SMS messages and checking email once class has begun, talking while teaching is taking place, and working on projects from other classes or other non-course activity, will be graded down.

Also, as the use of interactive media varies significantly across various student practices in this course, your grading is affected by your development of an initial

idea and your effort towards the progression of your skills and ideas, i.e. your willingness to learn and experiment with something new over time, rather than producing something at the last minute using parameters that you are already comfortable with.

Late Submission

Late work may not be accepted or assessed, or may be penalized: the lecturer may deduct 2 marks per day, up to 7 days. Work that is submitted more than 7 days after the due date may not be accepted for assessment. If you have a good reason for being unable to submit your work on time, it is important that you let your tutor, or lecturer know promptly – and no later than the **due date**. There are two kinds of provisions made for students who have good reasons for late submission:

1. Extensions

Students who are late with assignments may apply to their lecturer or tutor for an extension. You must apply for an extension before the **due date.** Extensions may be refused if you do not present documented medical or other evidence of illness or misadventure. An extension is only for a short period, usually no more than a week.

2. Special Consideration

Where, because of illness or misadventure, you cannot hand in an assignment on time, or your work has suffered, you can apply for Special Consideration. For information on Special Consideration (see https://my.unsw.edu.au/student/atoz/SpecialConsideration.html).

Applications for special consideration must be lodged with the COFA Student Centre (within 3 working days of the assessment to which it refers) – teaching staff will not accept applications. Applying for special consideration does not automatically mean that you will be
granted additional assessment or that you will be awarded an amended result. If you are making an application for special consideration (through COFA Student Centre) please notify your Lecturer in Charge.

Please note: a register of applications for Special Consideration is maintained. History of previous applications for Special Consideration is taken into account when considering each case.

Equity and Diversity

Students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convener prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equity and Diversity Unit (9385 4734 or http://www.equity.unsw.edu.au/disabil.html). Issues to be discussed may include access to materials, including Library materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

Academic honesty and plagiarism

As you will note in this Course Schedule, a wide range of art practices and techno-

logy are introduced within this course, some within a single class. You will not pick up everything you need simply by attending classes, but will need to follow the strands (and instructions for them) that interest you outside of class time.

You should take notes on everything.

Your lecturer or tutor, when consulting on or assessing your work, may ask for separate elements of any combined group of multimedia, in order to ascertain the "degree of construction" you have undertaken in the work, particularly when sampled elements are involved. This is not about LEGAL ownership (if you wish to actually 'release' your work, you may deal with those concerns yourself), but is about the degree of 'creative ownership', which will be determined by the lecturer. Your lecturer or tutor may ask for this at any stage of the semester, however many times it is deemed necessary. If you are unable to satisfactorily provide this, your work may not be accepted for assessment. So if you're using sampled elements, keep track of your work and make a collection of files that "trace" your work. Please also read the general COFA section in this document on 'Academic Honesty and Plagiarism'. Where those generic UNSW guidelines appear to clash with this paragraph, this paragraph will prevail, as the UNSW guidelines fail to address postmodern concerns.

Penalties for academic dishonesty or plagiarism can be severe, and range from reduced marks, through failing the course, to exclusion from the University. Your responsibility is to understand what plagiarism is and take steps to avoid plagiarism in your assignments.

Other software systems

Students working on projects predominantly outside the university, using software systems and platforms that are not compatible with those used at the university, are still required to provide work-in-progress sessions at the required times. The student is responsible for ensuring the work is ready for tutorials in the necessary format and works on the machines and for assessment.

What is Plagiarism?

Plagiarism is the presentation of the thoughts or work of another as one's own. Examples include:*

-Direct duplication of the thoughts or work of another, including by copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;

-Paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;

-piecing together sections of the work of others into a new whole;

-presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and

-claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

For the purposes of this policy, submitting an assessment item that has already been submitted for academic credit elsewhere may be considered plagiarism.

Knowingly permitting your work to be copied by another student may also be considered to be plagiarism.

Note that an assessment item produced in oral, not written, form, or involving live presentation, may similarly contain plagiarised material.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does not amount to plagiarism.

The Learning Centre website is main repository for resources for staff and students on plagiarism and academic honesty. These resources can be located via:

http://www.lc.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in

Correct referencing practices.

Paraphrasing, summarising, essay writing, and time management;

Appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

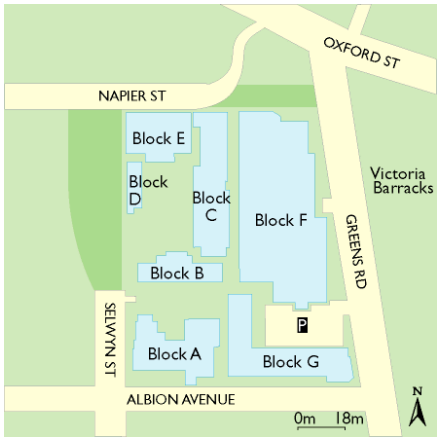
Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

** Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle*

† Adapted with kind permission from the University of Melbourne.

Computing Requirements

A portable hard-drive is recommended for students to store and transport their digital work. It is not uncommon for portable hard-drives to fail so it is important that you often back up all your work to DVD or CD. We will use Flash CS3 but may also use other applications.



Safety Information

Emergencies and evacuation

In case of emergency you should follow the instructions on the emergency procedures displays, which are located on each level and notify security on 9385-6666.

During evacuations always follow the directions given by fire wardens and proceed to the emergency assembly area, which is in front of the campus art store (red oval on diagram).

Students OHS responsibilities

Students are responsible for adhering to UNSW and COFA OHS policies and procedures, following instructions on safe work methods, promptly reporting hazards or accidents and ensuring that their conduct does not endanger others.

First aid information

If you are injured or are hurt in any way inform your supervisor. All accidents and incidents must be reported. The names and contact details of first aid officers on campus are displayed on the green and white first aid posters. Security staff are also trained first aid officers.

Electrical safety

Students should ensure that any portable electrical equipment they bring onto the campus (such as laptop computer power supplies) are tested and tagged. Such equipment will not be able to be used on campus if not tagged. Testing can be done at the Resource Centre.

Workplace safety and hazardous substances

Students should be aware of their responsibility to avoid causing injuries to themselves or to others. These injuries could include; eyestrain, hearing damage, back, neck and repetitive strain injury (RSI), burns, chemical poisoning, inhalation damage, lacerations and the like. Students using, or planning to use, unorthodox materials, or materials/processes/performances in a potentially damaging manner in their class, or related work, ARE REQUIRED to complete a Risk Assessment Form. This form must be signed by the lecturer and lodged with the relevant Technical Officer or School Administrative Assistant. Unorthodox materials are considered to be material, solvents, chemicals, paints, electricity etc. not covered by standard practice or tuition within the area. All potentially dangerous materials MUST be used in consultation with the mandatory material safety data sheets (MSDS) available at the point of acquisition of such materials. It is UNSW policy that no bodily parts or fluids are used on any campus for any purpose.

Public Liability

The University has appropriate insurance cover whereby you, the student and the University are indemnified in the event of you, while on work experience, placement or assignment (including such things as film/video shoots, setting up installations off site and performances) become legally liable for any injury to any person or damage to property caused by your negligent act.

A Letter of Indemnity Template is available for download from:

http://www.eng.unsw.edu.au/it/itproced/pdf/Letter_of_Indemnity_pdf.pdf

The relevant Lecturer or Head of School should sign this.

Course Schedule

Assignment submission dates will be provided at the beginning of the semester.

Week 1 **INTRODUCTION**

Lecture: The subject outline and assessment policy will be discussed. Assessment projects and the journal will be explained. Introduction to Interactive Media.

Tutorial: Students to introduce themselves. Introduction to the Processing development environment.

JOURNAL ASSESSMENT BEGINS.

Week 2 Transforming Mirrors: theory and practice of interactive media

Lecture: Concepts and practices of interactivity.

Tutorial: Response to movement I: mouse interactivity, iteration.

Mid-semester Break

Week 3 Interfaces: bound to and beyond the screen

Lecture: Practice and project examples of interface use and development.

Tutorial: Response to movement II: mouse interactivity, conditions and decisions.

Week 4 Concept & Project Development

Lecture: Brainstorming, researching, prototyping and planning interactive multimedia projects. Understanding the iterative process.

Tutorial: Working with camera input I: motion detection and extraction of background.

Week 5 Processing: Creative Code

Guest Lecture: take a glance into creative coding practices, debugging methods, and a range of resources

Tutorial: Working with camera input II: blob detection and path of movements.

Week 6 David Rokeby Special

Lecture: Artworks and their contexts and concepts from the Canadian interactive media artist David Rokeby.

Tutorial: Working with multiple media I: image manipulation and text.

Week 7 Practices of Looking: Surveillance and Visual Culture

Lecture: Surveillance strategies and counter practices.

Tutorial: Concept pitch presentations

Week 8 **Rafael Lozano-Hemmer Special**

Lecture: Artworks and their contexts and concepts from the Mexican-Canadian interactive media artist Rafael Lozano-Hemmer.

Tutorial: Working with multiple media II: playing and manipulating sound.

Week 9 **Where To Go From Here**

This week, we will explore a range of media and methods involving Advanced Interactive Media & Participatory Practices.

Tutorial: Student directed time.

Week 10 **NO LECTURE THIS WEEK**

Tutorial: Student directed time.

Week 11 **Guest Lecture**

Lecturer: tba

Lecture: tba

Tutorial: Student directed time, last chance to get feedback from tutors on project submission.

Week 12 **NO LECTURE THIS WEEK**

Lecture: There will be no lecture this week.

Tutorial: Present your project (stage 3).

PROJECT PRESENTATION and JOURNAL hand in during the tutorial.

Resources for students

These references cover a range of online and offline material. They are by no means exhaustive and are intended as a starting point for your own exploration and research. For those of you studying more theoretically the links and books on new media and interactive design may be of more use than the technical books on Flash in the later sections.

Most of the technical references below will serve to teach you more than you'll need for much of the time in this class.

Electronic resources

The COFA Library has a number of subject guides and you can find the Digital Media subject guide here:
http://info.library.unsw.edu.au/cofa/guides/digimed/digimedkey.html
Other COFA subject guides http://info.library.unsw.edu.au/cofa/guides/art.html

Image/Search Engines

AltaVista Multimedia http://au.altavista.com/s?r=1
Amazing Picture Machine http://www.ncrtec.org/picture.htm
Google http://www.google.com/

Electronic Journals

Design Research Society http://www.designresearchsociety.org/
Eye http://www.eyemagazine.com/
First Monday http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/
IDN Magazine http://www.idnworld.com/
International Institute of Infonomics http://www.infonomics.nl/
Leonardo Electronic Almanac http://mitpress2.mit.edu/e-journals/LEA/
Neural http://www.neural.it/english/
Rhizome http://www.rhizome.org
Shift http://www.shift.jp/
We Make Money Not Art http://www.we-make-money-not-art.com/

Opinion & Link Sites

Don Norman http://www.jnd.org/
Edward de Bono: http://www.debono.com/
Edward Tufte http://www.edwardtufte.com/
Golan Levin http://www.flong.com/
Information Aesthetics http://infosthetics.com/
Lev Manovich http://www.manovich.net/
Linkdup http://www.linkdup.com/
Mark Pesce http://www.playfulworld.com/
Newstoday http://www.newstoday.com
The Disappearing Computer http://www.disappearing-computer.net/
Three.Oh http://www.threeoh.com/
Use It: Jakob Neilson http://www.useit.com/

Interactive Content Online

Andreas Muller's site http://www.hahakid.net/

Antirom http://www.antirom.com/antirom01/

Ars Electronica: http://www.aec.at

Art+Com http://artcom.de/

Blast Theory http://www.blasttheory.co.uk

Communiculture http://www.communiculture.org/

David Rokeby: http://homepage.mac.com/davidrokeby/home.html

Fabrica http://www.fabrica.it/ (go to the Gallery or Downloads section too)

Future Farmers http://www.futurefarmers.com/

Han Hoogerbrugge http://www.hoogerbrugge.com/

Hi-ReS! http://www.hires.net/

Impossible Geographies: http://www.impossiblegeographies.net

John Maeda http://www.maedastudio.com/

Joshua Davis/Praystation http://www.joshuadavis.com/

Lecielestbleu http://www.lecielestbleu.com/

Milla & Partner http://www.milla.de/

MIT Media Lab http://www.media.mit.edu/

Nikelab http://www.nikelab.com/

Noodle Box http://www.noodlebox.com/

NoStatic http://www.nostatic.it/

one9ine http://www.one9ine.com/

Pitaru http://www.pitaru.com/

Rafael Lozano-Hemmer: http://www.lozano-hemmer.com/

Requiem for a Dream http://www.requiemforadream.com/

Second Story Interactive Studios http://www.secondstory.com/

Show Studio http://www.showstudio.com/

Soda Play http://www.sodaplay.com/

Supershapes http://www.supershapes.com/

The Third Place http://www.hi-res.net (looks for the link, it is in their portfolio)

Tomato http://www.tomato.co.uk/

Tree-Axis http://www.tree-axis.com/

Turux http://www.turux.org/

Volkswagen Phaeton http://www.thephaeton.co.uk/universe/index.php

Wireframe Studio http://www.wireframe.co.za/

Yugo Nakamura http://www.yugop.com/

E-Books

Safari Tech Books Online (available via the UNSW Library database, Sirius) http://library.unsw.edu.au/

The library subscribes to a number of online books about programming. This is likely to continue due to the quick upgrades of software, which means that printed books go out of date quickly.

Websites

Processing: http://www.processing.org

Books on new media/interactive design

Johnson, Steven, Interface Culture, San Francisco: Harper Edge, 1997
UNSW Library call numbers: CFA 303.4833/1 OR S 303.4833/82

This is a very interesting and enlightening account of the role of the interface and technology in culture. It is also quite an entertaining read.

Crawford, Chris, The Art of Interactive Design, San Francisco: No Starch Press, 2003. UNSW Library call number: CFA 006.78/1

This book is really more aimed at games designers than interactive designers; though many of his ideas may be useful.

De Bono, Edward, Simplicity, London: Penguin, 1998
UNSW Library call number: S 153.42/82

This is an easy, interesting book looking at the notion of simplicity and how it might be a worthy goal for all kinds of aspects of life, including design and interaction.

Manovich, Lev, The Language of New Media, Cambridge, Mass.: MIT Press, 2001
UNSW Library call numbers: CFA 302.2/41 A OR CFA 302.2/41 OR S 302.2/175

This is the only real attempt (so far) at an historical account of New Media. It is, in my opinion, slightly flawed in its theory of interactivity, but an interesting and useful read because it places New Media in context of older media, particularly cinema.

Norman, D., The Design of Everyday Things, New York: Basic Books, 1988
UNSW Library call numbers: P 620.82/109 M OR P 620.82/109 N OR CFA 745.20924/NOR/2 OR CFA 745.20924/NOR/2 A

An excellent book about human-world interaction. Much of it is focused on product design, but also applies to interface design. It is of more use in terms of interactivity for its understanding of how humans look at and learn about the world.

Maeda, J., Maeda@Media, London: Thames & Hudson, 2000.
UNSW Library call number: CFA 700.285/61

Maeda, J., Design by Numbers, Cambridge Mass.: MIT Press, 1999.
UNSW Library call number: CFA 006.6/111

John Maeda is one of the longer standing artists and designers of interactive media. He revels in the idea of beauty and complexity from simplicity. He was one of the first people to work with interactive typography and sound input as an interaction in screen-based work. Also check out his website (see links previously).

Pesce, M., The playful world: how technology is transforming our imagination, New York: Ballantine Books, 2000.
UNSW Library call number: CFA 303.483/31

Tufte, E. R., Visual explanations: Images and quantities, evidence and narrative, Cheshire, Conn.: Graphics Press, 1997.
UNSW Library call numbers: CFA 741.6/128 OR SQ 701.1/36

Tufte, E. R., Envisioning information, Cheshire, Conn.: Graphics Press, 1990
UNSW Library call numbers: CFA 302.23/43 A OR CFA 302.23/43 OR PQ 006.6/78

Tufte, E. R., The visual display of quantitative information, Cheshire, Conn: Graphics Press, 1983.
UNSW Library call numbers: CFA 741.6/56 OR CFA 741.6/56 A OR SQ 001.4226/10 OR SQ 001.4226/10 A

Edward Tufte's books are all excellent. They explore the visualization and display of information with brilliant examples and are extremely readable too, don't just look at the pictures!

Technical/tutorial books

Reas, Casey and Fry, Ben, Processing: A Programming Handbook for Visual Designers and Artists
http://processing.org/learning/books/

Schiffman, Daniel, Learning Processing: A Beginner's Guide to Programming Images, Animation, and Interaction (Morgan Kaufmann Series in Computer Graphics)
http://www.shiffman.net/2008/07/31/book-release-learning-processing/

A number of the books are online resources, e-books via Safari Tech Books Online. You can access these via the UNSW library site. Try searching in Safari Tech Books Online first, you may find you love or hate the style.

Continual course improvement

Periodically student evaluative feedback on the course is gathered, using among other means, UNSW's Course and Teaching Evaluation and Improvement (CATEI) Process. Student feedback is taken seriously, and continual improvements are made to the course based in part on such feedback. Significant changes to the course will be communicated to subsequent cohorts of students taking the course.

Administrative Matters

For program advice and assistance, contact the School Assistant, Karen Ryan (phone 9385 0758). For assistance when other avenues have been unsatisfactory, contact the Head of the School of Media Art. For general inquiries, or to make appointments to see the Head of School contact the School Aministrative Officer, Karen Ryan (phone 9385 0758 or email: mediaarts@cofa.unsw.edu.au). For administrative inquiries and assistance (relating to enrolment, class lists, timetables etc.), contact the Faculty Student Centre [ground floor 'B' Block] (9385 0684). For purchase of course readers contact Lu Wang in the Finance Unit – F118, First floor 'F' block (tel: 9385-0796).