

SCHOOL OF ART

SART2841

# **ELECTRONIC TECHNOLOGIES**

**SESSION 2 2009** 

LECTURER

ALLAN GIDDY

Course Coordinator:	ALLAN GIDDY
Room	FG14
Phone	9385 0612
Email	a.giddy@unsw.edu.au
Consultation times	Tuesday 2-4:30

# **COURSE INFORMATION**

Units of Credit:	6
Hours per week:	3 hours in class; hours unsupervised as required by project work

\*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.

Parallel Teaching: SART3863, SART9753

#### **Course Aims:**

This practical class aims to introduce students to electronic art and technologies as used in contemporary art making through lectures, demonstrations, workshops, experiential learning and project work. It aims to teach students how to make artwork using innovative applications of new technology. Basic theory of electrical technologies, that is, the basics of how electricity works & how to safely wire up components, will be taught, explained and applied to the individual work of each student as the special requirements of each student's projects arise, these requirements could include:

- the use of sustainable energy in art & design practice
- pairing and connecting electrical components, e.g./ lighting, projectors.
- using motion sensors
- recycling electronic motors, appliances, battery run objects,
- designing and installing screen based installations
- interfacing digital technologies and computer software with moving objects
- using toys, machines, computer games, anything that changes or moves
- preparing for, and installing exhibitions and displays

#### The Learning and Teaching Activities

- Practical workshops, including OH&S instruction.
- Project briefings.
- Lectures.
- Tutorials.
- Production of an artwork in consultation with the lecturer in the studio in response to set project work designed to expand your experiential knowledge and understanding of metal casting in contemporary and historical contexts.
- Production of artworks in consultation with the lecturer in the studio to develop your ability to conceptualise, process and fabricate cast metal artworks from your own knowledge, research and imaginative ideas.
- Analysis and critique of work in progress.
- Presentation and critique of students' completed artwork.

# **Computing Requirements**

As required by individual students.

# ASSESSMENT

To qualify for a passing grade all students must complete all set project work. Where absences in excess of three (3) classes occur, students may be given a fail grade (UF). Students must be punctual and participate in all class activities. Projects are to be submitted on time, however if there is a valid reason for a late submission your lecturer will designate an extension, or ask you to apply for Special Consideration.

To achieve a pass the student must achieve the projects' and course's objectives.

One formal evaluation of Satisfactory, or Unsatisfactory will be made mid-session and students will be informed by their class lecturer of this determination.

The full range of grades will be used:

85 – 100 High Distinction

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84 – 75	Distinction

- 74 65 Credit
- 64 50 Pass
- 49 47 Conceded Pass
- 46 0 Fail

The project work will be assessed as follows:

Project 1	40%
Project 2	60%

#### General Objectives of Electronic Technology

On completion of this course you should be able to:

- Achieve a standard of art practice appropriate to this introductory level of study.
- Research, fabricate and present completed practical projects that are primarily defined by your creative ideas, knowledge, experience and insights.
- Identify aesthetic elements of expression with an enhanced sensibility and appreciation of electronic art.
- Possess the fabrication skills and processes to achieve objectives.
- Appreciate the range of techniques which will provide kinds of movement, light or sound patterns.
- Develop skills in understanding wiring diagrams.
- Experiment with materials such as visual arts media.
- Synthesise elements of expression and conceptual ideas towards a poetic, imaginative response to creative project work at a standard appropriate to this level of study.
- Perceive, analyse and critique artworks with enhanced visual literacy.
- Appreciate more the shaping of contemporary visual art practices pertaining to innovative applications of electronics.
- Organise and document your ideas towards the resolution of your own initiatives.
- Keep a thorough record of the technology, skills, processes and occupational health and safety procedures along side your ideas and research for this course.

#### The Project's Objectives

To be provided with Project Briefings.

#### ON GOING ASSESSMENT

Assessment is a keystone in the learning process. Informal evaluations of your ideas and production in tutorials and group crits throughout the Session are invaluable sources of inspiration and knowledge.

The ability to evaluate one's own ideas is an attribute of all successful artists and this will be encouraged throughout the processes of art making.

#### ASSESSMENT PROCEDURE

First, completed projects are discussed in a Group Crit.

Students are invited to make an introductory statement of intent before open discussion of their work begins.

The lecturer makes their formal assessment of your artwork after the group crit is completed. The criteria for assessment is calibrated upon your achievement of the objectives of the projects, and the general objectives of the course [see above].

You are asked to remove your assessed work from campus and leave the workshops, exhibition or installation sites as you found it.

#### Week 0

No class

#### Week 1 Date 23/7/09

As we begin our academic year, COFA acknowledges the Gadigal clan of the Eora people, the traditional owners of this land.

Topic: In	ntroduction to Electricity
Lecturer	ALLAN GIDDY
Any readings required	As required for individual projects
Any online or other activities required.	Start by checking out to Oatley electronics and Conrad electronics sites

Week 2 Date	30/7/09	
Topic:	bic: Cable/wire joining. Circuit Soldering	
	Project	proposals before class (Advanced Electronics only)
Lecturer		ALLAN GIDDY
Any readings requ	lired	Look at past Biennale catalogues
Any online or othe	r activities required.	Visit to gallery containing electronic work
All advanced elect	ronics 3 <sup>rd</sup> year and M art	prepare presentations of major project

Week 3	Date 6/8/09	
Topic:	Solar Po	wer (Meeting UNSW main campus 2:30)
Lecturer		ALLAN GIDDY/ROB LARGENT
Any readings	s required	
Any online o	r other activities required.	Surf solar power related sites (including UNSW SOLARCH)

Week 4 I	Date 13/8/09			
Topic: :	Use of a meter. Low voltage power supplies			
	Project proposals before class (Advanced Electronics only)			
Lecturer	ALLAN GIDDY			
Any readings	Any readings required			
Any online or	Any online or other activities required.			
Week 5 I	Date 20/8/09			
Topic :	The Three pin plug			
Lecturer	ALLAN GIDDY			
Any readings	required			

Any online or other activities required.

# Week 6 Date 27/8/09

#### Mid Session Review / First Project Presented

Topic:	Project 1/ trial and group crit
Lecturer	ALLAN GIDDY
Any readings required	
Any online or other activities require	ed. Look at sites for ISEA/TISEA, Ars Electronica

One formal evaluation will be made mid – session and students will be informed by their lecturer of this determination. The purpose of this evaluation is to inform students of their progress and assist them to address problems that, if left unaddressed, may result in failing the course. An indication will be given to the student by grade.

# Week 7 RESEARCH WEEK

MID SEMESTER BREAK		REAK	7 <sup>th</sup> Sept – 13 <sup>th</sup> Sept
Week 8	Date	17/9/09	
Topic:			Lights, sensors, and switches
			(presentations by class members of components for sensing)
			Introduction of second project
Lecturer			ALLAN GIDDY
Any reading	gs require	d	

Week 9	Date 24/9/09	
Topic:	Inter	actives introduced (the artistic use of interaction)
Lecturer		ALLAN GIDDY
Anv reading	s required	
Any online o	r other activities required.	
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Week 10	Date 1/10/09	
Topic: :	One	to one project work
Lecturer		ALLAN GIDDY
Any reading	s required	
Any online o	r other activities required	Project based research
Week 11	Date 8/10/09	
Торіс	Proje	ect testing. One to one work
Lecturer		ATANAS DJONOV
Any reading	s required	
Any online o	r other activities required.	Project based research
Week 12	Date 15/10/09	
Topic:	Proje	ect Testing. One to one work
Lecturer		ATANAS DJONOV
Any reading	s required	
Any online o	r other activities required.	Project related
Week 13	Date 22/10/09	
Topic:	Proi	ect testing. One to one project work
Lecturer		ALLAN GIDDY
Any reading	s required	

Week 14 Date 29/10/09

Week 15 Date 5/11 /09

# ASSESSMENT WEEK Assessments start at 2pm sharp!!! Set up before class!!

#### BIBLIOGRAPHY

"Catching the Light" by Arthur Zajonic. "The Passion of the Western Mind" by Richard Tarnas. "Chaos" by James Gleick. "What is Life? Mind and Matter" by Erwin Schrodinger.Leonardo magazine-MIT press Superflex, Art Now, Berkhard and Riemschneider (eds), Berlin, 2002 All Sydney Biennale catalogues.

# **RESOURCES FOR SPI STUDENTS**

# SPI WEBSITE: CLOUDSPACE

https://au.omnium.edu.au/au\_2006s1\_unsw\_spi/base/index.php

http://www.cofa.unsw.edu.au/about/disciplines/sculptureperforminstall.html

#### STUDIO SPACES

SPI Postgraduate – FG12, the Cage.
SPI Honours – FG12
FG12 – Master of Art SPI major students.
FG 12 is the undergraduate SPI Major's studio.
FG14 is the SPI 1<sup>st</sup> Year major's studio.
FG14 is used by SPI Elective classes.

#### TOOL STORE

- The Tool Store and workshops on the Ground Floor of 'F' Block are open from 9am 4:45pm, Monday to Thursday
  - 9am 4pm Fridays

#### **CAMPUS OPENING HOURS**

• The campus is open, 7:30am – 9pm, Mon – Thursday

7:30 am - 6pm Fri.

10am – 4 pm Saturday at particular times during Sessions

#### SPI TECHNICAL SUPPORT

• Technical support, including inductions to machinery you are unfamiliar with can be requested from the technicians, to be organised in groups of at least 4.

#### ACCESS TO SCULPTURE WORKSHOPS

- SPI Workshops include woodwork, metal work, plaster and casting, foundry, electronics [in FG14].
- Use of all specialised workshop equipment requires competency training: discuss your needs with your lecturers and technicians to arrange training and testing.
- Workshops are open only when supervised by technical staff.

#### SPI DOCUMENTATION/TIME BASED RESOURCES

• SPI has a video projector; slide projector; DVD, VHS monitor.

- The Resource Centre has a digital video camera and digital stills camera dedicated for School of Art. Competency testing is **a must** from TBA technicians.
- All other Resource Centre equipment may be borrowed if you have passed their competency test. Borrowers cards required. Evening service available. Book ahead. See their website.

#### PAINTING STORE

 Things [props] may be borrowed from the Painting Store on the 2<sup>nd</sup> Floor, 'F' Block. Worth a look.

#### **RROSIE MUTT & AVAGO – INSTALLATION SPACES**

These are bookable spaces to try out installations, view work outside the clutter of the studio, and view miniature works and for assessment.

**EMAIL** 

Please leave these spaces in a better condition than you found them.

#### **EMAIL INFORMATION:**

All students have an "official" email address of the form:

z1234567@student.unsw.edu.au

where 1234567 is your student number

All email will be sent to your official university email address. You are required to read your official email regularly so that you do not miss urgent messages.

If you use the university's central email service (UNIMAIL), your official email will go into your central email box and you can access it from there as usual.

If you use an email account somewhere else, for example, outside the University, you *must* arrange to forward your email from your official address to the email account you use. This is your responsibility!

You can also access email from home via the dial-up service. For the central email service, you can access email from any web browser using Wisemail.

If you know your UNIPASS, you can set this up yourself via the web.

Go to the "do-it-yourself" page at <u>www.diy.unsw.edu.au</u>. If you don't know your UNIPASS (you should!), or you need help, contact DIS-Connect, who can arrange to provide your UNIPASS or set up the forwarding for you. The DIS-Connect desk is at the back of the Library and their phone number is 9385-1777.

#### SCULPTURE NOTICE BOARD

Important info as it happens appears on this notice board located half way along the ground floor corridor.

#### **Computing Requirements**

Usually, access to a digital camera, the internet.

# SPI OCCUPATIONAL HEALTH & SAFETY INFORMATION

OH&S is everyone's responsibility therefore it is up to each and every individual using the facilities to ensure that their actions and or omissions do not affect the health and safety of others. Staff and students are responsible for:

• Complying with COFA / OH&S policies and procedures i.e. Following safe working practices, following after hours access procedures etc.

- Wearing the correct personal protection equipment i.e., safety glasses, hearing protection and respirators with the correct cartridge for the application and covered shoes.
- Reporting any accidents and or any hazards or potential hazards to the technical or teaching staff as soon as possible.
- Being familiar with emergency procedures

# For safety reasons please follow the instructions of the technical staff. Failure to comply may result in cancellation of studio & workshop access.

#### SPI'S GENERAL SAFETY RULES

- Wear enclosed footwear at ALL TIMES. Sandals worn with woollen socks, thongs or bare feet are not an acceptable alternative.
- Wear appropriate clothing. No loose clothing or jewellery is to be worn when operating machinery and equipment.
- Tie back or cover hair
- **NEVER** use machinery until gaining competency
- NEVER use machinery when affected by any drug or alcohol {penalties apply}
- NEVER work alone
- ALWAYS obey written warnings
- ALWAYS wear appropriate personal protection when required
- NEVER smoke, drink or eat in the area
- **ALWAYS** clean up after yourself. Keeping studio areas clean and organised prevents unnecessary hazards to you and to others, and keeps equipment in working order.
- **DO NOT DRILL HOLES IN THE CEILING** there is a danger of contact with live cable.

If you suffer from a medical condition or if you are taking any medication that may impair your ability to operate machinery or equipment safely, please inform your supervisor and technical staff. Any information given by you will be held in the strictest confidence.

#### WORKING WITH HAZARDOUS SUBSTANCES

Compounds used in the workshops, studios and other areas of work may have hazardous properties. They may be toxic, flammable and/or explosive, may be carcinogens or have unknown physiological effects, or may sensitise the skin. All chemicals, glues, paints and powdered substances should be assumed to be potentially hazardous and care taken to prevent inhalation, skin contamination, fire and/or explosion. For information on how to use a substance safely refer to the **MATERIAL SAFETY DATA SHEET (MSDS).** MSDS's are available from the manufacturer/supplier or if you are unable to obtain a MSDS ask technical staff for assistance. Please read & follow the instructions for use, & keep the MSDS's sheets in your locker.

- **DO NOT USE** a substance if you have not been instructed or have information on how to work safely with it.
- Always wear your personal protective equipment when working with hazardous substances
- Always clean any spills immediately (See MSDS)

# APPROVAL FOR HAZARDOUS WORK

A risk assessment form must be completed for any hazardous work that you will be performing including using bio-hazardous, highly inflammable, toxic or chemical substances, or electrical wiring. Risk assessment forms are available from the COFA OHS website, technical staff or your lecturer. You must complete the form and have approval from your lecturer and/or Head of School before you begin work. A copy of the risk assessment must also be given to technical staff and the COFA OHS coordinator.

Information on how to complete a risk assessment is also given on the COFA OHS website

and if you need any assistance in completing the form you can ask the COFA OHS coordinator, technical staff or your lecturer.

# **EXHIBITS AND INSTALLATIONS**

To ensure the safety of exhibits and installations on campus an exhibit safety checklist must be completed and signed off by your supervisor. A risk assessment must also be completed if the exhibit contains food, lasers, noise, biological hazards, chemical hazards, fire hazards or any hazards that could pose a significant risk.

The checklist is available from the COFA OHS website, technical staff or your lecturer.

# ETIQUETTE, HEALTH & SAFETY IN THE SCULPTURE STUDIO

- Important announcements & news are posted on the Sculpture Notice Board any one in the Sculpture Area may post important notices.
- NOISE POLLUTION A quarantined space for using power tools, air tools and other noisy activities is available in the foundry book at the Tool Store.
- Please consider the safety and well being of other people, and isolate activities involving dangerous or annoying processes & materials.
- Keep work spaces tidy & passages clear in studios & workshops.
- If a notice says 'Do not touch ' it means what it says.
- Don't use someone else's work space or bench without asking their permission.
- Keep the Tea Room clean & tidy; don't use it as a storage space.
- Remove old completed work from all studios, including FG14 and the foundry if it's been assessed & it's all over Rover.
- Music, radios in the studio: please ask if it is ok with everyone. Not during class time please.

# **HEALTH & SAFETY IN EXTERIOR LOCATIONS –**

- · Do not obstruct walkways, doorways, fire exits, stairways, fire stairs
- · Do not use dangerous, biohazardous or inflammatory materials
- All constructions must be sound
- All works must be temporary or removable
- All works must be removed after your lecturer has seen them
- Leave the site as you found it.

# EXTERNAL WORK SPACES

- Do not leave your mess behind leave the area cleaner than you found it.
- Ask permission to store things outside.
- Anything left outside without permission will be thrown out.
- Fibre glass work must be done with protective clothing and mask under the extration hood in the foundry, not outside.

# GENERAL SAFETY INFORMATION FOR COFA

#### NB/ The emergency phone number is 9385-6666 (not 000).

You have a responsibility to not do anything that risks the safety or health of your fellow students and also staff.

This will involve informing your lecturer of any safety risks you become aware of, and also following the directions of staff in relation to such issues as equipment usage, and safety equipment and clothing.

You are responsible for:

- adhering to UNSW and COFA OHS policies and procedures,
- following instructions on safe work methods,
- · promptly reporting hazards or accidents
- ensuring your conduct does not endanger others.

# ADVICE AND INSTRUCTIONS TO STUDENTS REGARDING 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 Sheet. This form must be signed by the lecturer, then the Head of School and lodged with the relevant Technical Officer. 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.

Drawings undertaken in charcoal, pastel, etc, will need to be "fixed".

However fixative sprays must not be used in teaching rooms, and should not

be inhaled. There is a room on level two which has exhaust fans please fix your work outside or in this room.

It is UNSW policy that no bodily parts or fluids are used on any campus for any purpose.

**EMERGENCIES AND EVACUATION** In case of emergency you should follow the instructions on the emergency procedures displays, which are located on each level.

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).

**FIRST AID INFORMATION** If you are injured or are hurt in any way inform your supervisor.

Allaccidents 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**

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# STUDENTS ARE NOT PERMITTED TO WORK ON 240 VOLT EQIPMENT AT ANY TIME!

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.

#### ACADEMIC HONESTY AND PLAGIARISM

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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.

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

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#### ADMINISTRATIVE MATTERS

You may fail the subject if more than 3 absences are recorded. You must to actively participate in classes and complete all set work. You may fail the subject if you do not submit **all** set work to a satisfactory standard.

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 <a href="https://my.unsw.edu.au/student/atoz/SpecialConsideration.html">https://my.unsw.edu.au/student/atoz/SpecialConsideration</a>.

- Applications for special consideration must be lodged with the COFA Student Centre (within 3 working days of the assessment to which it refers) applications will **not** be accepted by teaching staff;
- 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 COFAv 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

Equity and diversity: those 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 <u>www.equity.unsw.edu.au/disabil.html</u>). Issues to be discussed may include access to 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.

#### 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