

MM34

Monash University

Advanced Architectural Studies - Heavy Metals Project



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SUMMARY FOR BENCHMARKING

How well is interdisciplinary learning supported by the assessment design?

This ID activity brought together a number of participants including higher education, research, government and cultural institutions. The project offered students exposure to a wide range of perspectives and values, and asked them to integrate these within a designed and constructed response.

How well does the assessment design fit the ID cohort?

Does it fit the level of *student expertise*?

Third year architecture students in this unit/course/subject worked with professionals from related and different disciplines on the development of a designed response. The challenges of the integration of differing viewpoints at this level of study were appropriate within this construct.

Does it respond to the *range and style of cohort learning expectations*?

Students involved in the project were from a particular discipline. The integration of a variety of perspectives can be seen as an extension of personal skillsets, but not necessarily an expansion of the disciplinary learning environment according to their expectations.

How well does the assessment design align to intended ID learning outcomes?

Do the *tasks and criteria* sufficiently support development of students' *disciplinary practices* ?

The focus of the unit was primarily on the extension of students' disciplinary and personal practices, challenged and refined by work with colleagues and advisors from different backgrounds and with differing agendas and values to be accommodated.

Do the *tasks and criteria* sufficiently support development of students' *interdisciplinary skills* ?

The development of broad interdisciplinary skills is supported by the team approach to production. Students were encouraged and supported to develop key professional and integrative skills, including research perspectives and agendas.

Do the student / staff roles influencing *project direction / aims* support the ID learning outcomes?

Staff contributed to the identification of opportunities for this built project, and the development of an initial brief. Students worked with project collaborators to refine the brief in response to emergent issues.

Do the student / staff roles influencing *project process / development* support ID learning outcomes?

The development of proposals in response to the issues identified by students and the project team formed the main content of the assessment tasks. These were developed with ongoing input from a number of project stakeholders as well as teaching staff, and through tutorial discussions as well as public forums. Formal submission of a portfolio at the conclusion of the study drew on all of these perspectives and experiences.

UNIT/SUBJECT/COURSE OUTLINE + OUTCOMES

This 3rd year unit examines issues in architectural production. This unit covers architectural production in relation to a range of historical, theoretical, material and speculative domains addressing diverse social, cultural, technological, and communicative aspects of architecture. Investigations will incorporate various methodologies and points of view. The unit will develop analytical methods for understanding and contributing to the evolving built environment.

In 2013 a number of students enrolled in this unit collaborated with MONA (Museum of Old and New Art), University of Tasmania - Institute for Marine and Antarctic Studies and the School of Arts based in Hobart; the Derwent Estuary Program; The University of Texas, Austin, Texas; The Massachusetts Institute of Technology (MIT) Boston, Massachusetts; with the Alvar Aalto Foundation, Finland; the CSIRO and a number of staff from the Monash Fine Art department and 5 post-graduate artists. The project, established by MONA founder David Walsh's partner, curator and artist Kirsha Kaechele, sought ways in which science and art unite in an attempt to address historical contamination issues facing the River Derwent estuary.

Students enrolled in the 3rd year unit were required to develop prototypes in response to the supplied brief and presented these to MONA. MONA selected the final design which was built by Monash students collaborating with engineers at MONA. They developed two structures – one called the Oyster Pontoon located within the River in front of MONA, and the other called the 'Retaining Wall', a large public pavilion, built on the MONA lawns to act as a centre piece for the project.

Learning Outcomes:

At the conclusion of this project students.....

- Have gained a broader exposure and deeper engagement with architectural production
- Develop a capacity to undertake research in architectural production
- Demonstrate the ability to critically assess aspects of architectural production
- Have gained familiarity with principles and strategies influencing the development of architecture
- Understand and be able to apply the rules of occupational health and safety appropriate to the unit of study.

UNIT/SUBJECT/COURSE ACTIVITIES & ASSESSMENT TASKS

Mid Semester Review: Public presentation of work in progress at Mid Semester Reviews. At the minimum at mid-semester reviews students will receive formal verbal and written feedback of work-in-progress based on public presentation to a panel.

Final Portfolio Submission 100% A continuation from Assessment Task 1, the Final Portfolio Submission (or equivalent) documents the final outcome of the Architecture Studies unit.

ASSESSMENT CRITERIA / MARKING

- Clear understanding of subject matter and appreciation of issues
- Well organized, with formulated and sustained presentation and response to critique
- Addresses all the specific objectives
- Creative insight and originality
- Work demonstrates broad exposure and deeper engagement with architectural production
- Capacity to undertake research in architectural production
- Ability to critically assess aspects of architectural production
- Familiarity with principles and strategies influencing the development of architecture



Unit Guide

ARC4501

Advanced architecture studies 1

Semester 1, 2016

Unit handbook information

Synopsis

This unit examines issues in architectural production. This unit covers architectural production in relation to a range of historical, theoretical, material and speculative domains addressing diverse social, cultural, technological, and communicative aspects of architecture. Investigations will incorporate various methodologies and points of view. The unit will develop analytical methods for understanding and contributing to the evolving built environment.

Mode of delivery

Caulfield (Evening)

Caulfield (Day)

Workload requirements

12 hours per week including 3 contact hours and 9 hours of independent study or equivalent.

Unit relationships

Prerequisites

Admission to Masters of Architecture and OHS1000 or by permission.

Prohibitions

None

Co-requisites

None

Academic overview

Learning outcomes

On successful completion of this unit, students will:

1. Have gained a broader exposure and deeper engagement with architectural production
2. Develop a capacity to undertake research in architectural production
3. Demonstrate the ability to critically assess aspects of architectural production
4. Have gained familiarity with principles and strategies influencing the development of architecture
5. Understand and be able to apply the rules of occupational health and safety appropriate to the unit of study.

Unit schedule

Each balloted group has varying activities and timelines. Please refer to individual unit outlines, on moodle or distributed in class, for specific dates and activities. The general structure may follow the following pattern:

Week	Activities
1-4	Lectures & Tutorial meetings
5	Mid-Semester review activity
6-12	Lectures & Tutorial meetings
14	<i>Studio Reviews</i>
15	<i>Final Submissions</i>

Teaching approach

- Lecture and tutorials or problem classes seminars
- A series of project-based seminars
- Seminar meetings will provide a forum for on-going feedback and monitoring of individual progress, while encouraging group discussion, critique and self-reflection. Occasional lectures and site visits will supplement the teaching context. These will provide the opportunity for specialist input as well as industry and community engagement.

Refer to individual unit details, which will be distributed in week 1, for detailed information regarding the approaches and modes of teaching. The unit details will be handed out by the tutors and placed on the moodle site for the unit.

Assessment summary

100% mixed mode

Assessment task	Value	Due date
Mid Semester Reviews	qualitative indicators of performance provided	around Week 5
Final Portfolio Submission (or Equivalent)	100	around Week 15

Assessments generally consist of presentations at mid-semester and the end of the semester and a final portfolio or paper submission, digital and/or hardcopy, comprising the entire semester's body of work. Written and verbal assessment of work-in-progress will be provided at key points during each project to ensure students receive formative feedback in preparation for the mid-semester review and final submission.

Assessment requirements

Participation

We will take attendance at all classes and you are expected to attend all class meetings. If you miss more than 20% of the classes you will be at risk of failing the unit.

Group work

In the cases where group work is necessary, groups will be formed and managed by the students with the agreement of tutors. Although students are encouraged to manage any issues arising from group dynamics (such as disputes), they are encouraged to notify tutors of any situations that may affect the group's performance capacity. If required, tutors and/or the coordinator may intervene as necessary in group formations or dynamics. Unless there is strong evidence for the situation to be otherwise, all group members will receive the same mark for a given task. Each group is responsible for developing a system for assignment submission. Each group assignment shall bear the name and student numbers of all members on the assessment coversheet.

The criteria to make this assessment will be determined by the teaching staff, who will assess the contribution of the individual students.

Assessment tasks

Each balloted group has varying activities and timelines. Please refer to individual unit details documents, on moodle or distributed in class, for specific activities, assessment tasks and timing. Generally, the unit will consist of submissions at mid-semester and the end of the semester, digital and/or hardcopy. Written and verbal assessment of work-in-progress will be provided at key points during each project to ensure students receive formal feedback at the mid-semester and end of semester.

Refer to individual unit details documents, which will be distributed in week 1, for detailed information regarding the details and distribution of assessment tasks for each group.

Generally assessment tasks will follow the following structure:

Assessment task title: Mid Semester Reviews

Task value: qualitative indicators of performance provided

Task due date: around Week 5

Details of task: Public presentation of work in progress at Mid Semester Reviews. At the minimum at mid-semester reviews students will receive formal verbal and written feedback of work-in-progress based on public presentation to a panel.

Presentation requirements: see unit details and handouts on the unit moodle site for single or multiple presentation requirements

Estimated return date: Feedback will be given during the mid-semester reviews

Criteria for marking: Assessment will follow standard guidelines as per Grading Schema.

Assessment task title: Final Portfolio Submission (or Equivalent)

Task value: 100

Task due date: around Week 15

Details of task: A continuation from Assessment Task 1, the Final Portfolio Submission (or equivalent) documents the final outcome of the Architecture Studies unit.

Criteria for marking: Assessment will follow standard guidelines as per Grading Schema.

- Work demonstrates broad exposure and deeper engagement with architectural production
- Capacity to undertake research in architectural production
- Ability to critically assess aspects of architectural production
- Familiarity with principles and strategies influencing the development of architecture

Grading schema

Standard Unit Grading Schema

Code	Grade	Mark	GPA value
HD	High Distinction	80 - 100	4
D	Distinction	70 - 79	3
C	Credit	60 - 69	2
P	Pass	50 - 59	1
N	Fail	0 - 49	0.3
WN	Withdrawn Fail		0

Faculty guidelines for grading schema

High Distinction 80-100 HD

Exceptionally clear understanding of subject matter and appreciation of issues; well organised, with formulated and sustained presentation and response to critique. Addresses all the specific objectives with many to a high standard. Evidence of creative insight and originality.

Distinction 70-79 D

Strong grasp of subject matter and appreciation of key issues; addresses all the specific objectives, with several to a high standard; clearly developed presentation and response to critique. Evidence of creative and solid work.

Credit 60-69 C

Competent understanding of subject matter and appreciation of the main issues; addresses all the specific objectives, some reasonably well. Clearly developed presentation and response to critique; well prepared and presented.

Pass 50-59

Satisfactory. Appreciation of subject matter and issues. Addresses all the specific objectives; work generally lacking in depth and breadth. Often work of this grade demonstrates only basic comprehension or competency. Work of this grade may be poorly prepared and presented. Investment of greater care and thought in organising and structuring work would be required to improve.

Fail 0-49 N

Unsatisfactory. Evidence of lack of understanding of subject, minimal or inadequate comprehension and does not address all the objectives. Work is often inadequate in depth and breadth and sometimes incomplete or irrelevant; lack of care and thought in organising and structuring work.

12 JANUARY 2014

MONA MADA Collaborate on Heavy Metal Pavilions

It's a heavy metal collaboration - but not as you know it.

MADA (Monash Art Design and Architecture) 'Design-Make' studio has been invited to collaborate with MONA (Museum of Old and New Art) on the recently launched 'Heavy Metal' project.

The project, established by MONA founder David Walsh's partner, curator and artist Kirsha Kaechele, sees science and art unite in an attempt to address historical contamination issues facing the River Derwent estuary.

As a legacy of 20th century industrial practice, the estuarine sediments are contaminated with heavy metals. Shellfish and some fish sourced from these areas can be unsafe to eat because of the mercury, lead, zinc, and cadmium levels.

Bringing together creative imagination and professional expertise from art, architecture, science and industry sectors, Heavy Metal has briefed a group of local, national and international artists, architects, scientists, industry members and students with a seemingly impossible task: find a way to filter out the metals from the River Derwent.

Essentially, the Heavy Metal Project will turn an environmental problem into a creative challenge for artists, architects and scientists.

The initial task of the project is to find ways to expose and then filter the heavy metals in the River Derwent. To achieve this, a pontoon and a land-based pavilion will become a feature within the MONA precinct, bringing awareness to the problem and engaging the community at the same time.

This being MONA, the MADA pavilions will not merely be functional; they'll also become provocative artworks.

The project will comprise two structures – one called the Oyster Pontoon to be located within the River in front of MONA, and the other called the 'Retaining Wall', a large public pavilion, built on the MONA lawns to act as a centre piece for the project.

The Oyster Pontoon will be installed sometime in 2014. This pontoon is essentially a small-scale oyster farm, and will culture native mud oysters as a tool to filter metals from the Derwent. However, until the pontoon is ready wild oysters from around the MONA site will be harvested – these oysters will provide scientists with information on environmental metal levels and will inform our understanding of potential ecosystem responses.

The Oyster Pontoon will be the scientific research hub from which scientists will gather data about the River. At the end of their lifespan, these oysters will not have died in vain - they will be heroically entombed into the Retaining Wall structure on the MONA lawn in a columbarium.

This 'Oyster Mausoleum' will become a part of MONA's summer MoMa market, with visitors invited to encase their own hero oyster from the pontoon into a concrete brick before placing it in the Retaining Wall. All this will be overseen from a new oyster bar, where healthy oysters, sourced from the clean, fresh waters of south-east Tasmania, will be served.

As founder Kirsha Kaechele says, the project turns a tragic flaw into a feature.

"We are essentially taking a depressing problem with no obvious solution and turning it into an opportunity for artists, architects and scientists to come together and see what innovative solutions they can create."

MADA's Head of Architecture, Dr. Diego Ramirez Lovering says; *"The MADA Heavy Metal project is exactly the type of experience that we seek to provide for students: not introspective, but real, outward looking, and engaging multiple stakeholders."*

Collaborators on the Heavy Metal project include the University of Tasmania - Institute for Marine and Antarctic Studies and the School of Arts based in Hobart; the Derwent Estuary Program; Monash Art Design and Architecture (MADA) Melbourne; The University of Texas, Austin, Texas; The Massachusetts Institute of Technology (MIT) Boston, Massachusetts; with the Alvar Aalto Foundation, Finland and input from the CSIRO.

"We understand that it is extremely unlikely we will clean the Derwent in our lifetime," says Kaechele, "but if the project raises awareness and inspires more people to think about solutions, we will see that as a successful outcome."