

FIT2105
Creative computing: understanding art, science and technology

Unit Guide

Winter semester, 2015

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FIT2105 Creative computing: understanding art, science and technology - Winter semester, 2015

This unit explores developments in art, science and technology, drawing on important periods in Italian history and culture as a background for understanding contemporary interdisciplinary practice. It will examine the nature and development of technology in science, engineering, the arts and architecture. Using the city of Prato and the museums, galleries, rural landscapes and built environments in the surrounding region, students will research, develop and present a team-based interdisciplinary project that draws on this rich historical, cultural and technological landscape.

Mode of Delivery

Prato (Day)

Workload Requirements

Minimum total expected workload equals 48 hours per week over a 3 week period comprising:

- 18 hrs lectures and discussions
- 48 hrs organised field trips and excursions
- 78 hrs of independent study

See also Unit timetable information

Unit Relationships

Prerequisites

Students must have at least 18 credit points of 1st year units from any degree by the commencement of the program in the student's proposed year of participation AND be enrolled full-time at Monash.

Chief Examiner

Associate Professor Alan Dorin

Campus Lecturer

Caulfield

Prato: Alan Dorin

Prato: Jon McCormack

Your feedback to Us

Monash is committed to excellence in education and regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through the Student Evaluation of Teaching and Units (SETU) survey. The University's student evaluation policy requires that every unit is evaluated each year. Students are strongly encouraged to complete the surveys. The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

For more information on Monash's educational strategy, see:

www.monash.edu.au/about/monash-directions/ and on student evaluations, see:
www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html

Academic Overview

Learning Outcomes

On successful completion of this unit, students should be able to:

- analyse the historical development of a new technology and its role in shaping science, art and culture;
- observe, research and gather information in an unfamiliar cultural context;
- identify and critically analyse technological, scientific and artistic innovations within the period of historical development studied;
- apply identification and analysis skills to contemporary developments in creative computing and technology;
- conceptualise, design and develop a response to an interdisciplinary problem;
- participate productively in interdisciplinary teams: as a means of solving complex problems; developing communication skills; and be able to give and receive constructive feedback.

Unit Schedule

Week	Activities	Assessment
0		
1	Centre orientation, unit overview, introduction to art, science and technology. Prato old city orientation, textile museum visit. History of architecture. Time measurement technology and representation, Florence visit. History of art, Prato art museum visit.	Assessment tasks: 1, 4, 5, 7
2	City of Lucca visit. Study and presentation day. Progress in philosophy, science and technology: Artificial Life, Florence visit (x2). Systematics and classification. Study and presentation day.	Assessment tasks: 2, 3, 6, 8
3	Project implementation and research. Project presentation day.	Final project and presentation.
4		
5		
6		
7		
8		
9		
10		
11		
12		
	Examination period	LINK to Assessment Policy: http://policy.monash.edu.au/policy-bank/academic/education/assessment/assessment-in-coursework-policy.html

*Unit Schedule details will be maintained and communicated to you via your learning system.

Teaching Approach

- **Lecture and tutorials or problem classes**

Background material and introductory information will be provided in lectures and seminars on topics in the history and development of art, science and technology. Problems and questions will be raised for student discussion and to prompt further enquiry outside of the lecture theatre.

- **Research activities**

A number of short research exercises will be undertaken during the first two weeks of the unit. These exercises will assist students to develop a substantive research project to be completed in week three.

- **Field trips**

We will visit museums, cultural sites, gardens, galleries and towns in the vicinity of Prato to gather information and experience first-hand the locations, works and inventions that have shaped developments in art, science and technology in the West.

- **Enquiry-based learning**

Unit Schedule

Practical exercises will involve students enquiring into subjects of interest to them, or researching methods and ideas introduced in lectures by teaching staff and classmates. Students will use practical observational techniques, including drawing and photography, to develop a detailed understanding of regional artefacts, processes and cultures that relate to the unit's themes.

- **Problem-based learning**

Exercises will involve solving problems that help inform the unit's main themes in art, science and technology and the relationships between them. These range from simple problems on-location (and in specific geographical or cultural contexts) to more complex problems in planning and development of the unit's main project.

Assessment Summary

In-semester assessment: 100%

Assessment Task	Value	Due Date
PRATO ORIENTATION WALKING TOUR	0%	Week 1
DIGITAL HERITAGE	0%	Week 2
SYSTEMATICS AND CLASSIFICATION	10%	Week 2
MEASUREMENT and TIME TECHNOLOGY	15%	Week 1
THE DEVELOPMENT OF ART	10%	Week 1
THE DEVELOPMENT OF ARCHITECTURE	10%	Week 2
HOW TECHNOLOGY SHAPES SOCIETY	5%	Week 1
THE RELATIONSHIPS BETWEEN SCIENCE AND TECHNOLOGY	0%	Week 2
Final project and presentation.	50%	Week 3

Assessment Requirements

Assessment Policy

Faculty Policy - Unit Assessment Hurdles

(<http://intranet.monash.edu.au/infotech/resources/staff/edgov/policies/assessment-examinations/assessment-hurdles>)

Academic Integrity - Please see resources and tutorials at

<http://www.monash.edu/library/skills/resources/tutorials/academic-integrity/>

Assessment Tasks

Participation

Participation requirements:

- Participation in classroom and externally situated discussions and field-trip exercises.
- Attendance on all site, museum and gallery visits.
- Attendance at all staff and student presentations.

Performance will be judged based on:

- active contribution of new ideas
- offering and receiving constructive criticism
- articulate presentation of informed, considered, carefully researched new work

• Assessment task 1

Title:

PRATO ORIENTATION WALKING TOUR

Description:

Familiarise yourself with Prato, its historic buildings and landmarks.

Weighting:

0%

Criteria for assessment:

Due date:

Week 1

• Assessment task 2

Title:

DIGITAL HERITAGE

Description:

Observe beneath the veneer of a contemporary city's physical and cultural form to understand how its current state has been influenced by antiquity.

Weighting:

0%

Criteria for assessment:

Due date:

Week 2

• **Assessment task 3**

Title:

SYSTEMATICS AND CLASSIFICATION

Description:

Observe and record the insect and plant life of Italy. Systematically classify your findings using the principles developed by our scientific forbears.

Weighting:

10%

Criteria for assessment:

Students will be assessed based on the utility of the classification system they devise, their resourcefulness in seeking and identifying things to classify, and the skill with which they present their findings.

Students participating in this group work will be assessed together, each receiving the same result for this assessment task.

Due date:

Week 2

• **Assessment task 4**

Title:

MEASUREMENT and TIME TECHNOLOGY

Description:

Apply classical techniques for measurement. Seek out and record the history of time-keeping technology in Florence, Prato and other towns.

Weighting:

15%

Criteria for assessment:

Students will be assessed based on their demonstrated ability to put into practice ancient techniques of measurement, and in their resourcefulness and observational skills at cataloguing and organising a record of historical time-keeping devices.

Students participating in this group work will be assessed together, each receiving the same result for this assessment task.

Due date:

Week 1

• **Assessment task 5**

Title:

THE DEVELOPMENT OF ART

Description:

In an art museum (e.g. Prato's Museo Civico di Prato / Museo Palazzo Pretorio or the Uffizi gallery, Florence), trace the development of perspective projection, the introduction of different pigments, developments in period style, appropriate and favoured subjects for painting. How can you date a painting by looking for the presence of these indicators?

Weighting:

10%

Criteria for assessment:

Students will be assessed based on the level of understanding they show of developments in painting and the innovation they exhibit in explaining them or bringing them to light in a short report.

Due date:

Week 1

• **Assessment task 6**

Title:

THE DEVELOPMENT OF ARCHITECTURE

Description:

Create your own photographically documented and mapped “spotters” tour of Prato architecture of different periods.

Weighting:

10%

Criteria for assessment:

Students will be assessed based on the innovation and ingenuity they demonstrate in seeking out, recording and presenting the architecture of Prato. They will be assessed also on the thoroughness and diligence paid to research of architectural styles and their construction or representation in the built environment of Prato.

Students participating in group work will be assessed as individuals and will be required to submit descriptions and self-assessments of their own contributions. Additionally, each student will be asked to provide feedback on the participation of others in their group which, along with information obtained by the staff during observation of group activities, will contribute to their grade for an activity.

Due date:

Week 2

• **Assessment task 7**

Title:

HOW TECHNOLOGY SHAPES SOCIETY

Description:

As you wander around the Textile Museum of Prato, identify and trace the ways in which the development of textile manufacturing technology has influenced the social fabric and structure of the city over the years.

Weighting:

5%

Criteria for assessment:

Students will be assessed individually based on the level at which they identify and analyse the impact the textile industry has had on life in Prato (and vice versa) through their engagement with the resources and displays at the textile museum.

Due date:

Week 1

• **Assessment task 8**

Title:

THE RELATIONSHIPS BETWEEN SCIENCE AND TECHNOLOGY

Description:

Follow the study guide as you move through the rooms of the Museo Galileo exploring the history of science and technology through the eyes of a researcher studying Artificial Life.

Weighting:

0%

Criteria for assessment:

Due date:

Week 2

• Assessment task 9

Title:

Final project and presentation.

Description:

Design and develop a team response to an interdisciplinary problem that draws upon the historical, cultural and technological landscape you have studied during the course.

Present this work to the class during a 15 to 20 minute seminar and engage in discussion with your classmates and the teaching staff about your work.

Weighting:

50%

Criteria for assessment:

Students will be assessed based on their understanding of the underlying problem and its historical, cultural and technological landscape. They will be assessed also based on the success of their method in addressing the problem using multidisciplinary approaches and the innovation shown in responding to the problem using contemporary insight, knowledge and skills.

Students participating in group work will be assessed as individuals and will be required to submit descriptions and self-assessments of their own contributions. Additionally, each student will be asked to provide feedback on the participation of others in their group which, along with information obtained by the staff during observation of group activities, will contribute to their grade for an activity.

Due date:

Week 3

Learning resources

Monash Library Unit Reading List (if applicable to the unit)

<http://readinglists.lib.monash.edu/index.html>

Feedback to you

Types of feedback you can expect to receive in this unit are:

- Informal feedback on progress in labs/tutes
- Graded assignments with comments

Extensions and penalties

Submission must be made by the due date otherwise penalties will be enforced.

You must negotiate any extensions formally with your campus unit leader via the in-semester special consideration process: <http://www.monash.edu.au/exams/special-consideration.html>

Returning assignments

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.

Resubmission of assignments

Students may not resubmit assignments.

Assignment submission

It is a University requirement

(<http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-academic-integrity-managing-pla>

for students to submit an assignment coversheet for each assessment item. Faculty Assignment coversheets can be found at <http://www.infotech.monash.edu.au/resources/student/forms/>. Please check with your Lecturer on the submission method for your assignment coversheet (e.g. attach a file to the online assignment submission, hand-in a hard copy, or use an electronic submission). Please note that it is your responsibility to retain copies of your assessments.

Online submission

If Electronic Submission has been approved for your unit, please submit your work via the learning system for this unit, which you can access via links in the my.monash portal.

Technological Requirements

Students should regularly check the unit Moodle page for announcements.

In addition to everything needed for travel and a 3-week stay in Italy, students should bring:

- Camera
- Laptop
- Headphones (or ear-buds)
- Mobile phone with global roaming or local SIM
- Summer clothes, hat, sunglasses
- Umbrella or rain-jacket
- A4 blank-page notebook
- Pencils (graphite), sharpener, eraser, pens, ruler

Field trips

In addition to visiting sites around the town of Prato, the unit may visit the following sites (depending on availability and individual student project requirements):

Towns including:

- Lucca
- Florence
- Siena
- Bologna
- Pisa

Study sites including:

Assessment Requirements

- Museo di Palazzo Poggi -- Scienza e Arte (Bologna)
- Anatomical theatre of the Archiginnasio (Bologna)
- Siena cathedral and associated buildings
- Museo Civico di Siena (Siena)
- Galileo Museum (Florence)
- La Specola (Florence)
- Boboli gardens (Florence)
- Uffizi gallery (Florence)
- Museo del Tessuto (Prato)
- Museo Civico di Prato / Museo Palazzo Pretorio (Prato)
- Florence duomo and baptistry (Florence)
- Basilica Santa Maria Novella (Florence)
- San Lorenzo and the Laurentian Library (Florence)

Additional subject costs

Sample student budget:

\$2500 Airfare (less if booked early)

\$1050 Food \$50 x 21 days (less if self-catered)

\$100 Local travel to/from Rome

\$1500 Accommodation (less if shared)

\$1600 Prato facility, local study travel, site entry fees

6 credit point unit attracts standard tertiary fee

Some scholarships, travel insurance and travel bursaries may be available subject to conditions.

Other Information

Policies

Monash has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University's academic standards, and to provide advice on how they might uphold them. You can find Monash's Education Policies at:

www.policy.monash.edu.au/policy-bank/academic/education/index.html

Faculty resources and policies

Important student resources including Faculty policies are located at

<http://intranet.monash.edu.au/infotech/resources/students/>

Graduate Attributes Policy

<http://www.policy.monash.edu/policy-bank/academic/education/management/monash-graduate-attributes-policy.h>

Student Charter

www.opq.monash.edu.au/ep/student-charter/monash-university-student-charter.html

Student services

The University provides many different kinds of support services for you. Contact your tutor if you need advice and see the range of services available at <http://www.monash.edu.au/students>. For Malaysia see <http://www.monash.edu.my/Student-services>, and for South Africa see <http://www.monash.ac.za/current/>.

Monash University Library

The Monash University Library provides a range of services, resources and programs that enable you to save time and be more effective in your learning and research. Go to www.lib.monash.edu.au or the library tab in [my.monash](#) portal for more information. At Malaysia, visit the Library and Learning Commons at <http://www.lib.monash.edu.my/>. At South Africa visit <http://www.lib.monash.ac.za/>.

Disability Liaison Unit

Students who have a disability or medical condition are welcome to contact the Disability Liaison Unit to discuss academic support services. Disability Liaison Officers (DLOs) visit all Victorian campuses on a regular basis.

- Website: <http://www.monash.edu/equity-diversity/disability/index.html>
- Telephone: 03 9905 5704 to book an appointment with a DLO; or contact the Student Advisor, Student Community Services at 03 55146018 at Malaysia
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1, Building 55, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Malaysia Campus