



ADAD2400 Introduction to Systems for Interactive Media

Term T1, 2019

Course Information

Units of Credit: 6

Course Overview

Course Description

In this course students will be introduced to algorithms and the basics of programming interactive systems for artists and designers. Students will learn to work with leading development tools for programming interactive media experiences and will learn core principles of computer programming, software design patterns and data structures. They will learn about the core paradigms for creative programming, including code-based and visual programming environments. The course will cover the basics of designing interactive systems, dealing with graphics, sound, text, files and file systems, common data types such as numbers and colours, designing motion and introducing randomness into programs. These concepts will be applied to the creation of interactive installations and artworks, and students will make a prototype system. This course provides a series of reusable learning resources that students can refer back to in subsequent courses.

Course Learning Outcomes

On completion of this course, the student should be able to:

1. Create basic graphical interactive computer programs and apply algorithmic thinking in the solution of creative programming tasks.
2. Design complex interactive systems utilising systems thinking concepts.
3. Create new designs for interactive systems that are informed by recent history and contemporary practice in the creative uses of interactive technology.

Teaching and Learning in this Course

This course uses a variety of teaching approaches:

Blended/online

- Review - assessment tool
- Moodle - learning management system

Lectures

Disseminate information including core concepts and examples, and generate debate.

Tutorials

Working in small groups, promoting reflective learning, and also introducing core skills working with digital systems.

Studio

Promote independent practice, experimentation, testing, self-reflection and review.

Assessment

	TITLE	WEIGHTING	ASSESSMENT TYPE
Assessment Task 1	Algorithmic Thinking	50%	Process Journal
Assessment Task 2	Interactive Experience Prototype	50%	Project

References for this Course

Reading

Course reading will be available via Moodle.

References and other resources for this course

Each week a number of resources and activities will be made available on the LMS and you are required to engage in these resources between your class times.

Information Literacy

To assist in the development of online information literacy skills, students will be directed to:

- ELISE for Postgraduate Students (Enabling Library Information Skills for Everyone), an online information tutorial about finding and using information at UNSW Library:
<http://subjectguides.library.unsw.edu.au/elise>
- Online subject guides designed by the COFA Library to accompany specific Art and Design discipline areas:

Art: <http://subjectguides.library.unsw.edu.au/art>

Design: <http://subjectguides.library.unsw.edu.au/design>

- Library How to Use Guides (includes Using Sirius and Using the LRD):
<http://library.unsw.edu.au/HowDoI>
- Endnote Tutorials to learn how to use EndNote bibliographic software to store, organise and manage your references: <http://www.endnote.com/training>

Software

The course will involve using the following software, available on the university lab computers:

- Processing
- IntelliJ IDEA

General

- UNSW Library Home Page: <http://www.library.unsw.edu.au>
- The UNSW Library Catalogue: <http://lrd.library.unsw.edu.au>
- Sirius (UNSW Databases & e-Journals): <http://sirius.library.unsw.edu.au>

E-Journals

Access to UNSW e-Journal subscriptions is available via the LRD or Sirius, e.g.: UNSW Library Home page > Sirius > Find e-Journal > Title

Examples include:

- Art, Design and Communication in Higher Education
- Creativity Research Journal Design issues
- Graphis Journal of Visual Culture
- Leonardo
- Media International Australia
- Visual Communication
- Working papers in Art & Design

UNSW Library Databases

Access to UNSW Database subscriptions is available via the LRD or Sirius, e.g.: UNSW Library Home page > Sirius > Find Resource > Title ... (type in database name)

Examples include:

ArtBibliographies Modern

Art Full-Text

Avery

Business Source Premier

Communication and Mass Media Complete

Design and Applied Arts Index

Factiva

JSTOR

Project MUSE

ProQuest

Sage Full Text Collections

Image Collections

- ARTstor Digital Collection (available via LRD and Sirius)
- Digital Collections Subject Guide
- Creative Commons Image search: <http://search.creativecommons.org> (to find images you can use, mix and share)