FIT3023
Interactive environments

Unit Guide

Semester 2, 2009

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Table of Contents

FIT3023 Interactive environments - Semester 2, 2009

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Introduction

Welcome to FIT3023, Interactive Environments.

The purpose of this unit information is to give you an overview of the unit, the content of the unit, the way the unit will be taught and the method of assesment. It is very important that you read this material thoroughly - if you are unsure about any of the issues listed you should consult your unit adviser as soon as possible. This document represents your contract of study in this unit for the current semester.

As games have developed over the years from humble, almost abstract beginnings, so too has the desire to merge gaming with the narrative tradition. Advances in technology have seen games begin to rival cinema in terms of sound and visual effects, but are they competing within the same paradigm? Students will learn to differentiate between modes of interactivity, and to navigate the representational issues invoked by combining the sometime conflicting narrative models they employ.

Unit synopsis

In this unit students will study the various types of interaction, simulation and visualisation related to creating interactive games based content, covering topics such as genres of immersive interactive environments as well as the principles and techniques of game design and game play. In addition, students will learn how to design and develop their own immersive and interactive environments following industry development methods.

Learning outcomes

At the completion of this unit students will have a theoretical and conceptual understanding of:

1. the principles underlying interactive environments;
2. a wide variety of interactive and immersive environments;
3. the impact of a variety of interactive environments on audiences/users and industry requirements in developing a commercial product, including production teams, production phases, development environments and marketing issues.

At the completion of this unit students will have developed attitudes that enable them to appreciate the ethical issues involved with game development and value the contributions of peers, cooperating within the class unit, reflecting the development team in industry.

At the completion of this unit students will have the skills to create an interactive environment using a set middleware or authoring tool.

At the completion of this unit students will have developed the teamwork skills needed to critically discuss developmental processes and techniques within a group environment.

Contact hours

4 x contact hrs/week

Workload

For on campus students, workload commitments are:

- one-hour lecture and
- three-hour laboratory, sometimes requiring advance preparation and
- a minimum of 2-3 hours of personal study for every hour of contact time in order to satisfy reading and assignment expectations

Unit relationships

Prerequisites

FIT2015 or DIS1911

Prohibitions

MMS3405

Relationships

FIT3023 is a core unit in the Multimedia major of the Bachelors of Information Technology and Systems.

You may not study this unit and MMS3405 in your degree.

Teaching and learning method

Lectures in this subject will cover a range of theory related to games, interactivity and implementation of 3D environments. Students are expected to integrate this theory into their assignment tasks.

Laboratory classes will provide instruction of technical skills necessary to complete assessment tasks, as well as an opportunity to get feedback on assessment progress.

Timetable information

For information on timetabling for on-campus classes please refer to MUTTS, http://mutts.monash.edu.au/MUTTS/

Tutorial allocation

On-campus students should register for tutorials/laboratories using the Allocate+ system: http://allocate.cc.monash.edu.au/

Unit Schedule

Week	Topic	References/Readings	Key dates
1	Introduction		
2	Philosophy of interactivity	Chapter 1	
3	Audience expectations		
4	Interactivity Design	Chapter 4	Assignment 1 Due
5	Sound and music in an environment	Chapter 8	
6	Emotion in Interactivity	Chapter 5	
7	Introduction to Virtools		
8	Workflow of Interaction Design Planning		Assignment 2 Due
9	UI Design		
10	Camera Design and Cinematography		
Mid semester break			
11	Interaction Design in Virtools		
12	Shaders in Virtools		Assignment 3 due
13	Presentations		

Unit Resources

Prescribed text(s) and readings

There is no required text in this unit.

Recommended text(s) and readings

Gauthier, J, Building Interactive Worlds in 3D, Focal Press, 2005,
ISBN: 0240806220

Bartle, Richard. *Designing Virtual Worlds.* Indianapolis, New Riders, 2003

Virtools Fundamentals
by Daniel Liu & Shaun Le Lacheur Sales
Publisher: Axis 3D Technology Inc
ISBN-10: 9868320801
ISBN-13: 978-9868320802

Required software and/or hardware

Maya 2009, Autodesk

Virtools 4.0

Software will be available in the tutorial labs for student access.

Software may be:

- purchased at academic price at good software retailers

Equipment and consumables required or provided

Students may use the facilities available in the computing labs. Information about computer use for students is available from the ITS Student Resource Guide in the Monash University Handbook. You will need to allocate up to **8** hours per week for use of a computer, including time for newsgroups/discussion groups.

Study resources

Study resources we will provide for your study are:

The FIT3023 web site on MOODLE, where lecture slides, weekly tutorials, assignment specifications and supplementary material will be available.

Assessment

Overview

Practical Assignments: 100%

Faculty assessment policy

To pass a unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit's examination, and
- 40% or more in the unit's total non-examination assessment, and
- an overall unit mark of 50% or more.

If a student does not achieve 40% or more in the unit examination or the unit non-examination total assessment, and the total mark for the unit is greater than 44% then a mark of no greater than 44-N will be recorded for the unit.

The unit is assessed with three assignments. To pass the unit you must:

- achieve no less than 50% in the combined assessment

Assignment tasks

Assignment coversheets

Assignment coversheets are available via "Student Forms" on the Faculty website:
http://www.infotech.monash.edu.au/resources/student/forms/
You MUST submit a completed coversheet with all assignments, ensuring that the plagiarism declaration section is signed.

Assignment submission and return procedures, and assessment criteria will be specified with each assignment.

- **Assignment task 1**

  Title:
  Analysis of existing Interaction Design
  Description:
  Students will analyse an existing Interactive Environment and perform a presentation regarding how the program exhibits good examples of interaction design.
  Weighting:
  30%
  Due date:
  Friday Week 4, 14th August, 3pm
  Remarks:
  Please refer to supplied brief on MOODLE for detailed description of this assignment

- **Assignment task 2**

  Title:
  3D Assets for Interaction
  Description:
  Students will construct appropriate 3D assets for an Interactive Environment and import them into Virtools to ensure their construction has been successful.
  Weighting:
  30%
  Due date:
  Friday Week 8, 11th September, 3pm
  Remarks:
  Please refer to supplied brief on MOODLE for a detailed description of this assignment

- **Assignment task 3**

  Title:
  Interactive Environment
  Description:
  Students will take the 3D assets created in Assignment 2 and build an interactive environment that exhibits good design practices
  Weighting:
  40%
  Due date:
  Lab Class, Week 12
  Remarks:
  Presentation of Interactive Environment during Lab class in Week 12. Please refer to your timetable for exact times and locations.

Due dates and extensions

Please make every effort to submit work by the due dates. It is your responsibility to structure your study program around assignment deadlines, family, work and other commitments. Factors such as normal work pressures, vacations, etc. are not regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

Students requesting an extension for any assessment during semester (eg. Assignments, tests or presentations) are required to submit a Special Consideration application form (in-semester exam/assessment task), along with original copies of supporting documentation, directly to their lecturer within two working days before the assessment submission deadline. Lecturers will provide specific outcomes directly to students via email within 2 working days. The lecturer reserves the right to refuse late applications.

A copy of the email or other written communication of an extension must be attached to the assignment submission.

Refer to the Faculty Special consideration webpage or further details and to access application forms:
http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html

Late assignment

Assignments received after the due date will be subject to a penalty of **10% per day, or part thereof.**

Return dates

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

Appendix

Please visit the following URL: http://www.infotech.monash.edu.au/units/appendix.html for further information about:

- Continuous improvement
- Unit evaluations
- Communication, participation and feedback
- Library access
- Monash University Studies Online (MUSO)
- Plagiarism, cheating and collusion
- Register of counselling about plagiarism
- Non-discriminatory language
- Students with disability
- End of semester special consideration / deferred exams