



# MMST12017 Game Design

## Term 1 - 2019

Profile information current as at 28/04/2024 11:09 am

All details in this unit profile for MMST12017 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

### General Information

#### Overview

Digital games, also referred to as video games, computer games, console games, online games or mobile games, exist in a variety of formats, platforms and genres. This unit provides an introduction to the theories, principles and methods of game design. It analyses the essential elements of games that designers work with to create the all-important player experience. Activities such as conceptualising, designing, prototyping and evaluating games are explored.

#### Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

#### Pre-requisites or Co-requisites

Prerequisite DGTL11006 Coding Fundamentals or MMST11002 Web Design

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

#### Offerings For Term 1 - 2019

- Brisbane
- Bundaberg
- Mackay
- Online
- Rockhampton
- Sydney

#### Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

#### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

### Class Timetable

#### [Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### [Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### 1. **Practical Assessment**

Weighting: 30%

#### 2. **Practical Assessment**

Weighting: 25%

#### 3. **Practical Assessment**

Weighting: 45%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## CQUniversity Policies

**All University policies are available on the [CQUniversity Policy site](#).**

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

## Previous Student Feedback

### Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

#### Feedback from 'Have your Say' Feedback

##### Feedback

Students would like access to a greater pool of pre-written example scripts with simple explanations.

##### Recommendation

The collection of scripts will be expanded to include more examples with explanatory notes.

#### Feedback from 'Have your Say' Feedback

##### Feedback

Assessment tasks need to be staggered to avoid conflict with other units.

##### Recommendation

Assessment dates will be reviewed.

#### Feedback from 'Have your Say' Feedback

##### Feedback

Some students would like the option to investigate 3D games.

##### Recommendation

The option to develop 3D games will be considered.

## Unit Learning Outcomes

### On successful completion of this unit, you will be able to:

1. Explain theories, principles and methods of game design
2. Conceptualise a game and communicate ideas through design documentation
3. Competently use software tools for creating games and game assets
4. Create a prototype for a game, applying theories, principles and methods of game design
5. Evaluate a game in terms of theories and principles of game design

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Practical Assessment - 30%	•			•	•
2 - Practical Assessment - 25%	•	•	•		
3 - Practical Assessment - 45%	•	•	•	•	•

## Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Communication	•	•	•	•	•
2 - Problem Solving	•	•	•	•	•
3 - Critical Thinking	•	•	•	•	•
4 - Information Literacy	•	•	•	•	•
5 - Team Work	•	•		•	
6 - Information Technology Competence	•	•	•	•	•
7 - Cross Cultural Competence	•	•		•	•
8 - Ethical practice	•	•		•	•
9 - Social Innovation					
10 - Aboriginal and Torres Strait Islander Cultures					

## Alignment of Assessment Tasks to Graduate Attributes

[illegible]

## Textbooks and Resources

### Textbooks

MMST12017

#### Prescribed

#### **Game Design Workshop: A Playcentric Approach to Creating Innovative Games, Third Edition**

Third Edition (2014)

Authors: Tracy Fullerton

CRC Press

Boca Raton , Florida , United States

ISBN: ISBN 9781482217162

Binding: Paperback

#### **Additional Textbook Information**

The prescribed textbook, *Game Design Workshop* is also available in digital format from the CQUni library, or through <https://www.safaribooksonline.com> (using your CQUni student id and password).

However, if you prefer your own personal copy, they can be purchased at the CQUni Bookhop here: <http://bookshop.cqu.edu.au> (search on the Unit code)

### IT Resources

#### **You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Adobe Audition CC
- Adobe Illustrator CC
- Microsoft PowerPoint
- Microsoft Word
- Piskel (free from <http://www.piskelapp.com>)
- Unity Personal Edition (free from <https://store.unity.com>)
- Adobe Photoshop CC (Student pricing - <https://www.adobe.com/au/creativecloud/buy/students.html>)

## Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Jim Picton** Unit Coordinator

[j.picton@cqu.edu.au](mailto:j.picton@cqu.edu.au)

## Schedule

### **Week 1 - 11 Mar 2019**

Module/Topic	Chapter	Events and Submissions/Topic
An introduction to games	Hunicke, R, LeBlanc, M & Zubek, R 2004, <i>MDA: A Formal Approach to Game Design and Game Research</i> , viewed 28 January 2019, <a href="http://www.cs.northwestern.edu/~hunicke/MDA.pdf">http://www.cs.northwestern.edu/~hunicke/MDA.pdf</a>	
	Kramer, W 2000, <i>What is a Game?</i> , viewed 07 January 2019, <a href="http://www.thegamesjournal.com/articles/WhatIsaGame.shtml">http://www.thegamesjournal.com/articles/WhatIsaGame.shtml</a>	
	Maroney, K. 2001, <i>My Entire Waking Life</i> , viewed 07 January 2019, <a href="http://www.thegamesjournal.com/articles/MyEntireWakingLife.shtml">http://www.thegamesjournal.com/articles/MyEntireWakingLife.shtml</a>	

**Week 2 - 18 Mar 2019**

Module/Topic	Chapter	Events and Submissions/Topic
The role of the Game Designer	Fullerton, T 2014, <i>Chapter 1: The Role of the Game Designer</i> , in Game Design Workshop, CRC Press, 2014.	

**Week 3 - 25 Mar 2019**

Module/Topic	Chapter	Events and Submissions/Topic
The structure of games	Fullerton, T 2014, <i>Chapter 2: Structure of Games</i> , in Game Design Workshop, CRC Press, 2014.	

**Week 4 - 01 Apr 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Conceptualising a game	Fullerton, T 2014, <i>Chapter 6: Conceptualisation</i> , in Game Design Workshop, CRC Press, 2014.	

**Week 5 - 08 Apr 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Prototyping a game	Fullerton, T 2014, <i>Chapter 7: Prototyping</i> , in Game Design Workshop, CRC Press, 2014.	

**Vacation Week - 15 Apr 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Mid-term break (no classes)		Finalise Assignment 1 which is due Monday, next week.

**Week 6 - 22 Apr 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Formal game elements	Fullerton, T 2014, <i>Chapter 3: Working with Formal Elements</i> , in Game Design Workshop, CRC Press, 2014.	<b>Paper Prototype Game, Written Report &amp; Game Design Journal (Weeks 2-5)</b> Due: Week 6 Monday (22 Apr 2019) 11:45 am AEST

**Week 7 - 29 Apr 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Dramatic game elements	Fullerton, T 2014, <i>Chapter 4: Working with Dramatic Elements</i> , in Game Design Workshop, CRC Press, 2014.	

**Week 8 - 06 May 2019**

Module/Topic	Chapter	Events and Submissions/Topic
System dynamics	Fullerton, T 2014, <i>Chapter 5: Working with System Dynamics</i> , in Game Design Workshop, CRC Press, 2014.	<b>Visual and Sound Design for Games &amp; Game Design Journal (Weeks 6-8)</b> Due: Week 8 Friday (10 May 2019) 11:45 pm AEST

**Week 9 - 13 May 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Communicating your designs	Fullerton, T 2014, <i>Chapter 14: Communicating your Designs</i> , in Game Design Workshop, CRC Press, 2014.	

**Week 10 - 20 May 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Digital prototyping	Fullerton, T 2014, <i>Chapter 8: Digital Prototyping</i> , in Game Design Workshop, CRC Press, 2014.	

**Week 11 - 27 May 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Publishing a game	Fullerton, T 2014, <i>Chapter 15: Understanding the New Game Industry</i> , pp. 470-474, in <i>Game Design Workshop</i> , CRC Press, 2014.	

**Week 12 - 03 Jun 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Review Week	Please complete the 'Have your Say' student feedback survey in Moodle.	Finalise Assignment 3, which is due next week.

**Review/Exam Week - 10 Jun 2019**

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Unity 2D Digital Prototype Game, Game Concept Document (GCD) &amp; Game Design Journal (Weeks 9-12)</b> Due: Review/Exam Week Monday (10 June 2019) 11:45 pm AEST

**Exam Week - 17 Jun 2019**

Module/Topic	Chapter	Events and Submissions/Topic
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## Assessment Tasks

### 1 Paper Prototype Game, Written Report & Game Design Journal (Weeks 2-5)

**Assessment Type**

Practical Assessment

**Task Description**

Assignment 1 requires you to develop a playable paper prototype game which will lay the foundation for subsequent digital development in Assignments 2 and 3. Paper prototyping is extensively used within the game industry and forms the crux of Professor Tracy Fullerton's playcentric methodology as presented in the *Game Design Workshop* textbook. Fullerton's approach facilitates the rapid, robust and cost-effective development of game design mechanics, dynamics and aesthetics, whilst using playtesting feedback from real players to improve the overall player experience. Your paper prototype will be documented within a written report, and you will reflect on your learning journey by using a Game Design Journal (blog). In combination, these tasks allow you to demonstrate how well you can apply your understanding of the theoretical concepts covered in the unit textbook and broader course material.

Please refer to the unit website for detailed information about Assignment 1.

**Assessment Due Date**

Week 6 Monday (22 Apr 2019) 11:45 am AEST

**Return Date to Students**

2 weeks after submission

**Weighting**

30%

**Assessment Criteria****Deliverables:**

1. **Paper Prototype Game.** Develop and upload a complete and playable paper prototype game, including all components required for play.
2. **Written Report - 1500 words (+/-10%).** Create a written report which thoroughly documents your prototype game and explains how your design relates to the approach used with the 'Game Design Workshop' textbook.
3. **Game Design Journal (Weeks 2-5).** Complete journal (blog) entries addressing designated topics.

**Allocation of marks:**

- Paper Prototype Game - 16 marks

- Written Report - 10 marks
- Game Design Journal (Weeks 2-5) - 4 marks
- Total = 30 marks (30% of your overall score)

#### Supplementary notes:

- Be aware that this **assignment is due on Monday 22nd April 2019 - Week 6 (immediately following the mid-term break)**.
- The paper prototype game that you submit **must be playable and complete**.
- Your submission **must meet the constraints of the task**.
- The game design ideas which underpin your paper prototype **must** be original and you cannot use someone else's Intellectual Property (IP) within your work e.g. *Star Wars*, Monopoly.
- Evidence of successful experimentation, innovation or high quality artwork will result in higher marks.
- Penalties will be applied for late submission or failing to comply with the assignment's requirements (e.g. game is incomplete).

Please refer to the unit website for more detailed assignment criteria, along with exemplars and supporting materials.

#### Referencing Style

- [Harvard \(author-date\)](#)

#### Submission

Online

#### Submission Instructions

Please refer to the unit website for assignment submission instructions.

#### Learning Outcomes Assessed

- Explain theories, principles and methods of game design
- Create a prototype for a game, applying theories, principles and methods of game design
- Evaluate a game in terms of theories and principles of game design

#### Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

## 2 Visual and Sound Design for Games & Game Design Journal (Weeks 6-8)

#### Assessment Type

Practical Assessment

#### Task Description

Assignment 2 requires you to design and develop custom visual and sound assets for your game protagonist (player character). Once complete, these assets will be used in the digital prototype game that you develop for Assignment 3. Additionally, you will continue to reflect on your learning journey in your Game Design Journal (blog).

Please refer to the unit website for detailed information about Assignment 2.

#### Assessment Due Date

Week 8 Friday (10 May 2019) 11:45 pm AEST

#### Return Date to Students

2 weeks after submission

#### Weighting

25%

#### Assessment Criteria

##### Deliverables:

1. **Visual Design for Games.** Character model sheet and sprite sheet for your game protagonist.



2. **Sound Design for Games.** Spawning, movement and death (or destruction) sounds for your game protagonist.
3. **Game Design Journal (Weeks 6-8).** Complete journal entries addressing designated topics.

#### Allocation of marks:

- Visual Design for Games - 13 marks
- Sound Design for Games - 7.5 marks
- Game Design Journal (Weeks 6-8) - 4.5 marks
- Total = 25 marks (25% of your overall score)

#### Supplementary notes:

- This assignment is **due on Friday 10th May 2019 - Week 8**
- Your submission **must** meet the constraints of the task.
- Assets that you create for the visual and sound design tasks **must** be original and you cannot use someone else's Intellectual Property (IP) within your work e.g. *Star Wars*, *Monopoly*.
- Penalties will be applied for late submission or for failing to comply with the assignment's requirements.

Please refer to the unit website for more detailed assignment criteria and supporting resources.

#### Referencing Style

- [Harvard \(author-date\)](#)

#### Submission

Online

#### Submission Instructions

Please refer to the unit website for assignment submission instructions.

#### Learning Outcomes Assessed

- Explain theories, principles and methods of game design
- Conceptualise a game and communicate ideas through design documentation
- Competently use software tools for creating games and game assets

#### Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

## 3 Unity 2D Digital Prototype Game, Game Concept Document (GCD) & Game Design Journal (Weeks 9-12)

#### Assessment Type

Practical Assessment

#### Task Description

Assignment 3 draws together everything that you have learned from the MMST12017 lectures, tutorial activities and previous assignments. Your task is to develop a functional two-dimensional (2D) Unity digital game prototype which:

- aligns with your original paper prototype game (as per Assignment 1);
- includes previously developed media assets (as per Assignment 2);
- delivers a quality play experience;
- satisfies stipulated constraints, and
- demonstrates understanding of the practical and theoretical content covered this term.

Finally, you will document your digital prototype in a Game Concept Document (GCD) and complete the last entries in your Game Design Journal. Please refer to the unit website for detailed information about Assignment 3.

#### Assessment Due Date

Review/Exam Week Monday (10 June 2019) 11:45 pm AEST

## Return Date to Students

2 weeks after submission

### Weighting

45%

### Assessment Criteria

#### Deliverables:

1. **Unity 2D Digital Prototype Game.** A functional and playable Unity 2D digital prototype game which satisfies the Assignment 3 design brief and constraints. You must provide a published version of your game, along with your Unity source files.
2. **Game Concept Document (GCD).** You will create a Game Concept Document (GCD) from a specified template.
3. **Game Design Journal (Weeks 9-12).** Complete journal entries addressing designated topics.

#### Allocation of marks:

- Unity 2D Digital Prototype Game - 28 marks
- Game Concept Document (GCD) - 13 marks
- Game Design Journal (Weeks 9-12) - 4 marks
- Total = 45 marks (45% of your overall score)

#### Supplementary Notes:

- This final assignment is **due on Monday 10th June 2019 - Exam Week (follows Week 12)**
- Your digital prototype game **must be functional and complete.**
- Your submission **must** meet the constraints of the task.
- You **must** submit a copy of your Unity source files.
- You **must** submit a published version of your Unity game.
- All media components developed for the digital prototype game **must** be original and you cannot use someone else's Intellectual Property (IP) within your work e.g. *Star Wars*, *Monopoly*.
- Evidence of successful experimentation and innovation will result in higher marks.
- Penalties will be applied for late submission or failing to comply with assessment requirements (e.g. incomplete source files).

Please refer to the unit website for more detailed assignment criteria.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Online

#### Submission Instructions

Please refer to the unit website for assignment submission instructions.

### Learning Outcomes Assessed

- Explain theories, principles and methods of game design
- Conceptualise a game and communicate ideas through design documentation
- Competently use software tools for creating games and game assets
- Create a prototype for a game, applying theories, principles and methods of game design
- Evaluate a game in terms of theories and principles of game design

### Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?



#### Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



#### Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



#### Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem