MMST12017 *Game Design*
Term 1 - 2017

Profile information current as at 20/04/2024 05:51 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 DGTL11001
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 - 2017

- Brisbane
- Bundaberg
- Distance
- Mackay
- Noosa
- Rockhampton

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 and Written Assessment**
Weighting: 30%
2. **Practical and Written Assessment**
Weighting: 25%
3. **Practical and Written 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 Moodle feedback and individual discussion.

Feedback
The 'design brief' for Assignment Three could be relaxed a little to afford students greater flexibility when selecting a game style or genre.

Recommendation
The assignment 'design brief' will be reviewed in order to afford greater flexibility (where possible).

Action
The revised assignment 'design brief' afforded students more flexible game design options.

Feedback from Direct observation, assessment task review.

Feedback
Although the pseudo-code environment of Construct 2 is simpler than previous software, students would benefit from completing a basic programming concepts course.

Recommendation
This issue should be remediated by the proposed 2017 Digital Media Course Program restructure (i.e. inclusion of an introductory programming subject).

Action
The current iteration of MMST12017 uses a simplified Unity framework known as the 'Playground Project' to compensate for perceived lack of coding skills. The new 'Coding Fundamentals' unit is running as a Term 2, 2017 'Pilot Course', so cohort performance will be reviewed in 2018.

Feedback from Assessment task review.

Feedback
A number of students seemed to struggle with the concept of using Adobe Photoshop as a digital illustration tool for the character design component.

Recommendation
Recommend the incorporation of cross-curricular strategies that foster the development of student digital illustration techniques.

Action
Introduction of the Piskel pixel art drawing package provided students with an alternate digital illustration platform to Photoshop and resulted in higher quality visual game assets.

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

— N/A Level
• Introductory Level
• Intermediate Level
• Graduate Level
◦ Professional Level
◦ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

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

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Practical and Written Assessment - 30%	•	•	•	•	•	•	•	•		
2 - Practical and Written Assessment - 25%	•	•	•	•	•	•	•	•		
3 - Practical and Written Assessment - 45%	•	•	•	•	•	•	•	•		

Textbooks and Resources

Textbooks

MMST12017

Prescribed

Game Design Workshop: A Playcentric Approach to Creating Innovative Games
3rd edition (2014)
Authors: Tracy Fullerton
CRC Press
Boca Raton , Florida , USA
ISBN: 978-1482217162
Binding: Hardcover

Additional Textbook Information
The *Game Design Workshop* textbook is an essential requirement for this course and provides weekly readings, contemporary case studies and the underpinning philosophy. It is available in traditional (paper) and digital formats from a variety of online bookstores. Be aware that the CQUniversity Bookshop only hold a limited quantity of paper copies.

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Adobe Audition CC
- Adobe Illustrator CC
- Adobe Photoshop CC (Student pricing - http://www.adobe.com/au/education/students/how-to-buy-eligibility.edu.html?)
- Microsoft Word
- Piskel (free from http://www.piskelapp.com)
- Unity Personal Edition (free from https://store.unity.com)

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

Schedule

Week 1 - 06 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
An introduction to games	Hunicke, R, LeBlanc, M & Zubek, R 2004, *MDA: A Formal Approach to Game Design and Game Research*, viewed 28 January 2017, http://www.cs.northwestern.edu/~hunicke/MDA.pdf Kramer, W 2000, *What is a Game?*, viewed 07 January 2017, http://www.thegamesjournal.com/articles/WhatIsaGame.shtml Maroney, K. 2001, *My Entire Waking Life*, viewed 07 January 2017, http://www.thegamesjournal.com/articles/MyEntireWakingLife.shtml	

Week 2 - 13 Mar 2017

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

Week 3 - 20 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
The structure of games	Fullerton, T 2014, *Chapter 2: Structure of Games*, in Game Design Workshop, CRC Press, 2014. Huizinga, J 1949, *Homo Ludens: A study of the play-element in culture*, second Edn, viewed 02 February 2017, http://art.yale.edu/file_columns/0000/1474/homo_ludens_johan_huizinga_routledge_1949_.pdf	

Week 4 - 27 Mar 2017

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

Week 5 - 03 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Prototyping a game	Fullerton, T 2014, *Chapter 7: Prototyping*, in Game Design Workshop, CRC Press, 2014.	**Paper Prototype, Written Report & Game Design Journal (Weeks 1-4)** Due: Week 5 Friday (7 Apr 2017) 11:45 pm AEST

Vacation Week - 10 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 17 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Working with formal game elements	Fullerton, T 2014, *Chapter 3: Working with Formal Elements*, in Game Design Workshop, CRC Press, 2014.	

Week 7 - 24 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Working with dramatic game elements	Fullerton, T 2014, *Chapter 4: Working with Dramatic Elements,* in Game Design Workshop, CRC Press, 2014.	**Visual and Sound Design for Games & Game Design Journal (Weeks 5-7)** Due: Week 7 Friday (28 Apr 2017) 11:45 pm AEST

Week 8 - 01 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Working with system dynamics	Fullerton, T 2014, *Chapter 5: Working with System Dynamics*, in Game Design Workshop, CRC Press, 2014.	

Week 9 - 08 May 2017

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

Week 10 - 15 May 2017

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

Week 11 - 22 May 2017

Module/Topic	Chapter	Events and Submissions/Topic

Publishing a game	Fullerton, T 2014, *Chapter 15: Understanding the New Game Industry*, pp. 470-474, in Game Design Workshop, CRC Press, 2014.	

Week 12 - 29 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Review		**Digital Prototype, Game Design Document & Game Design Journal (Weeks 8-11)** Due: Week 12 Friday (2 June 2017) 11:45 pm AEST

Review/Exam Week - 05 Jun 2017

Module/Topic	Chapter	Events and Submissions/Topic

Exam Week - 12 Jun 2017

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Paper Prototype, Written Report & Game Design Journal (Weeks 1-4)

Assessment Type
Practical and Written Assessment

Task Description
During MMST12017 you will complete three sequential assessment tasks which will each contribute to the development of a Unity 2-Dimensional (2D) digital prototype game.
Your challenge during Assignment 1 is to design and develop a 'Paper Prototype' game design which will become the basis of a 2D digital prototype game that you will develop for your Assignment 3 (Week 12). The development of a 'Paper Prototype' is a key step in the game design process as it allows the designer to rapidly bring their ideas to life, whilst providing a practical and economical way to test, evaluate and tweak a given set of mechanics, dynamics and aesthetics in order to deliver the most engaging gaming experience.
The prototype that you submit for Assignment 1 will include a game board, game rules, a game 'Event' card system and all game assets required to play the game (e.g. components such as tokens, counters). Once you have developed your prototype, you will document it within a written report, and reflect upon the process within a Game Design Journal.
Deliverables:

- Paper Prototype game (including all assets required for gameplay);
- Written Report (1500 words), and
- Game Design Journal (ongoing task). Complete entries for Weeks 1-4 on the course website (Moodle).

Please refer to the course website for the assignment details.

Assessment Due Date
Week 5 Friday (7 Apr 2017) 11:45 pm AEST

Return Date to Students

2 weeks after submission

Weighting
30%

Assessment Criteria
The assessment criteria for this assignment are summarised below:

- **Paper Prototype Game Design:** Provide a copy of the game rules, game board, along with photographs, scans or digital files in JPG format for **all** of the components required for gameplay (e.g. counters, tokens, game 'Event' cards etc).
- **Written Report – 1500 words:** Thoroughly document the mechanics, dynamics and aesthetics of your prototype game i.e. the rules and systems, how it should play and what the experience should ‘feel like’ for the player. The report should also detail (approximately 300-400 words) how you conducted play-testing (participant

details and methodology), and how you incorporated player feedback (aligns with the play-centric approach of the Game Design Workshop textbook). A suggested structure and supporting resources are provided on the course Moodle site.

- **Game Design Journal (ongoing task):** Complete one entry per week during Weeks 1-4 using the individual Game Design Journal blog on the course Moodle site (located in the 'Assessment' block in the left-hand menu). One of the journal entries must *critically reflect* on your experiences with Assignment 1, whilst a second journal entry will evaluate a digital game of your choice in terms of the underpinning game design principles. The remaining two entries are your choice and may simply include ideas, concepts or reference images for your game designs. Your journal entries do NOT need to be written; you may opt to record and upload a short video instead. Refer to the course Moodle site for specific information about the expectations for your journal.

Allocation of marks:

- Complete Paper Prototype game - 15 marks
- Written report (1500 words) - 9 marks
- Game Design Journal (ongoing task) - 6 marks

Supplementary notes:

- 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*.
- 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.

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

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Please refer to the course web site 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 5-7)

Assessment Type
Practical and Written Assessment

Task Description
This assignment will challenge you to develop visual and audio media to support your primary game character (protagonist).
Deliverables:

- Visual design. Delivered in two formats - 1x Character Model Sheet, and 1x game-ready 'Sprite Sheet' for your game protagonist.
- Sound design. Spawning, movement and death sounds for your game protagonist.
- Game Design Journal (ongoing task). Complete entries for Weeks 5-7 on Moodle.

Please refer to the course website for more detailed task information.

Assessment Due Date
Week 7 Friday (28 Apr 2017) 11:45 pm AEST

Return Date to Students

2 weeks after submission

Weighting
25%

Assessment Criteria
The assessment criteria for this assignment are summarised below:

- **Visual design:**
  - 1x Character Model Sheet delivered in either unflattened Adobe Photoshop (PSD), or Adobe Illustrator (AI) format
  - 1x game-ready 2D 'Sprite Sheet' delivered in .PNG format for your game protagonist. The Sprite Sheet must include sprites for all of the main poses (movements or actions) required by your protagonist during the digital game that you will develop for Assignment 3.
  - **Note:** It would be appropriate to upload progressive character design ideas and sketches as part of your ongoing *Game Design Journal* via the course website (Moodle).
- **Sound design:**
  - Spawning, movement and death sounds for your game protagonist.
  - Delivered in two formats: game-ready, compressed audio files (MP3 format) and raw source files (unflattened Adobe Audition or similar)
- **Game Design Journal (ongoing task):** Complete one entry per week during Weeks 5-7 using the individual Game Design Journal blog on the course Moodle site (located in the 'Assessment' block in the left-hand menu). One of the journal entries must critically reflect on your experiences with the visual or sound design tasks for Assignment 2, whilst a second journal entry will evaluate a digital game of your choice in terms of the underpinning game design principles. The remaining entry is your choice and may simply include ideas, concepts or reference images for your game designs. Your journal entries do NOT need to be written; you may opt to record and upload a short video instead. Refer to the course Moodle site for specific information about the expectations for your journal.

Allocation of marks:

- Character Design - 10 marks
- Sound Design - 10 marks
- Game Design Journal (ongoing task) - 5 marks

Supplementary notes:

- Your character and sound design **must** be original and you cannot use someone else's Intellectual Property (IP) within your work e.g. *Star Wars*.
- Penalties will be applied for late submission, or for failing to comply with the assignment's requirements.

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

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Please refer to the course web site 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 Digital Prototype, Game Design Document & Game Design Journal (Weeks 8-11)

Assessment Type
Practical and Written Assessment

Task Description
The summative assessment task will draw together everything that you've learned from the theory and lab activities through the creation of a functional two-dimensional (2D) Unity digital game prototype and a supporting Game Design Document. Additionally, you will finalise the entries in your personal Game Design Journal for Weeks 8-11 of the course.
Deliverables:

- Functional Unity prototype 2D digital game (including all supporting media assets);
- Game Design Document (GDD), and
- Game Design Journal (ongoing task). Complete the final entries for Weeks 8-11 on the course website (Moodle).

Please refer to the course website for the assignment details.

Assessment Due Date
Week 12 Friday (2 June 2017) 11:45 pm AEST

Return Date to Students

By Certification Date

Weighting
45%

Assessment Criteria
The assessment criteria for this assessment are summarised below:

- **Digital Prototype:** A functional 2D game produced using the Unity game development software which fully addresses the Assignment 3 design brief.
- **Game Design Document (GDD):** A complete GDD (based upon the supplied template) which accurately reflects the technical design and implementation of the digital prototype.
- **Game Design Journal (ongoing task):** Complete one entry per week during Weeks 8-11 using the individual Game Design Journal blog on the course Moodle site (located in the 'Assessment' block in the left-hand menu). One of the journal entries must *critically reflect* on your experiences with Unity for Assignment 3 i.e. did your Paper Prototype game design concept translate successfully to digital? Why, or why not? Within a second journal entry you will evaluate your ongoing journey as a Game Designer i.e. is this something that you'd like to pursue as a career, will it remain a hobby...or neither? The remaining two entries are your choice and may simply include ideas, concepts or reference images for your game designs. Your journal entries do NOT need to be written; you may opt to record and upload a short video instead. Refer to the course Moodle site for specific information about the expectations for your journal.

Allocation of marks:

- Unity digital prototype 2D game (incl supporting assets) - 22 marks
- Game Design Document - 17 marks
- Game Design Journal - 6 marks

Supplementary Notes:

- You are to provide copies of **all** supporting assets used in the design of your prototype i.e. source media files for visual and audio components.
- 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*.
- 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.

Please refer to the course website for more detailed assessment criteria.

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Please refer to the course web site 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