School of Information and Physical Sciences

INFT3950: Games Design

Singapore PSB
Trimester 2 - 2024 (Singapore)

COURSE OUTLINE

OVERVIEW

Course Description

Introduces the techniques of designing games for the digital entertainment industry. Students will analyse key game design elements including game genres, concepts, virtual worlds, storytelling, character, user interface design, and core technologies with a focus on the conceptual component of games design. Students will assimilate and expand upon the key theories and practices associated with games design via a series of written and practical projects.

Academic Progress Requirements

Nil

Assumed Knowledge

Students are expected to have at least a basic level of computer literacy. This will include basic competency with the use of 'Office' style applications (word processing, presentation and spreadsheet) and internet/web browsers.

Contact Hours

Singapore PSB

Computer Lab
Face to Face On Campus
2 hour(s) per week(s) for 13 week(s) starting Week 1

Lecture
Face to Face On Campus
2 hour(s) per week(s) for 13 week(s) starting Week 1

Unit Weighting

10

Workload

Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

CONTACTS

Course Coordinator

Singapore PSB
Dr Jacqueline Bailey
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Consultation: By Email

Teaching Staff

Other teaching staff will be advised on the course Canvas site.

School Office

School of Information and Physical Sciences
SR233 Social Sciences Building
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SYLLABUS

Course Content

Topics will be selected from:

- Fundamentals of games
- Historic context of the Computer Games industry
- Game genres and themes
- Narrative and character development
- Generating computer imagery
- Interactivity
- Virtual worlds
- Game concept documentation
- Games production cycle
- Physical simulations
- Game engines

Course Learning Outcomes

On successful completion of this course, students will be able to:

1. Demonstrate an informed knowledge of concepts fundamental to games design
2. Communicate using the terminology specific to games design
3. Describe emerging trends within the games industry
4. Demonstrate an awareness of the ethical dimensions relevant to games design
5. Demonstrate an informed knowledge of screen-based interactivity
6. Critically evaluate using the key concepts involved in games design
7. Describe the processes involved in the games production cycle
8. Produce industry standard documentation towards a games concept proposal
9. Produce a visual presentation towards a games concept proposal.

Course Materials

Recommended Reading:

Gibson, J. (2014). Introduction to Game Design, Prototyping, and Development: From Concept to Playable Game with Unity and C#. Addison-Wesley Professional.

Required Text:

Fundamentals of Game Design, Adams, Ernest. New Riders Press, 3 Edition. ISBN-13: 978-0321929679.
Please note that the 2nd edition of the text is also suitable, however there are differences in the content in some areas. Please consider these changes before adopting this edition.

COMPULSORY REQUIREMENTS

In order to pass this course, each student must complete ALL of the following compulsory requirements:

Course Assessment Requirements:

- Assessment 4 - Game Design Presentation: Pass requirement 40% - Must obtain 40% in this assessment item to pass the course.

  Students whose overall mark in the course is 50% or more, but who score less than 40% in the compulsory item and thus fail to demonstrate the required proficiency, will be awarded a Criterion Fail grade which will show as FF on their formal transcript. However, students in this position who have scored at least 25% in the compulsory assessment item will be allowed to undertake a supplementary 'capped' assessment in which they can score at most 50% of the possible mark for that item.

SCHEDULE

Week	Week Begins	Topic	Learning Activity	Assessment Due
1	6 May	Course Introduction	Read Chapter 1 of Adams No computer lab	
2	13 May	Designing & Developing Games	Read Chapter 2 of Adams Creating a game designers toolbox	
3	20 May	Game Concepts	Read Chapters 3,4,5,7 of Adams Paper based game design exercise	
4	27 May	Game Worlds	Read Chapter 8 of Adams Paper based game evaluation	
5	3 Jun	Creative and Expressive Play	Read Chapter 9 of Adams High Concept Slides	Assessment 1 Due Sunday 23:59 SGT
6	10 Jun	Character Development	Read Chapter 10 of Adams High Concept Presentations	Assessment 1 Presentation - Presented in Week 6 Labs
Recess				
7	24 Jun	Storytelling and Narrative	Read Chapter 11 of Adams Game Design Models and Tools	
8	1 Jul	Creating the User Experience	Read Chapter 12 of Adams AR/VR demo, UI/UX evaluation	
9	8 Jul	Gameplay	Read Chapter 13 of Adams	
10	15 Jul	Core Mechanic	Read Chapter 14 of Adams Developing game interfaces	
11	22 Jul	Game Balancing	Read Chapter 15 of Adams Player types and adaptive design Assignment 4 Presentations	Assessment 2 Report Due Sunday 23:59 SGT Presentation Session 1
12	29 Jul	Level Design	Read Chapter 16 of Adams Assignment 4 Presentations	Assessment 3 Due Sunday 23:59 SGT Presentation Session 2
13	5 Aug	Revision		

ASSESSMENTS

This course has 4 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	High Concept Presentation	Presentations due in Week 6 lab class, slides to be submitted by 23:59 SGT, 9th June 2024 (Week 5)	Individual	20%	1, 2, 3, 4, 5, 6, 7, 8, 9
2	Game Design Report	Week 11, Sunday 23:59 SGT, 28th July 2024	Individual	30%	1, 2, 3, 4, 5, 6, 7, 8, 9
3	Research Awareness	Weeks 3-12, to be completed by 23:59 SGT, 4th August 2024	Individual	10%	1, 2, 3, 4
4	Game Design Presentation*	Presented in Weeks 11 and 12 of the course.	Individual	40%	1, 2, 3, 4, 5, 6, 7

* This assessment has a compulsory requirement.

Late Submissions The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 - High Concept Presentation

Assessment Type Presentation
Purpose Prepare a game high concept and pitch it to an audience.
Description In this assignment, students (either individually or in a pair) will develop a High Concept Presentation to pitch their design ideas for a specific game. This specific game will draw on a broad initial idea for a game concept that will be provided via Canvas.
Weighting 20%
Length 5 minute presentation (~ 5 pages/slides)
Due Date Presentations due in Week 6 lab class, slides to be submitted by 23:59 SGT, 9th June 2024 (Week 5)
Submission Method Online
Assessment Criteria Provided on Canvas
Return Method Online
Feedback Provided Online - 2 weeks after submission/presentation.
Opportunity to Reattempt Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 2 - Game Design Report

Assessment Type Report
Purpose Prepare a comprehensive game design report ready for production.
Description In this assignment, students (either individually or in a pair) will develop a game design document based on industry-accepted requirements. Drawing on the theoretical course content provided in lectures, and the practical game design skills developed during tutorials, students will expand and elaborate on their initial game design concept from Assignment 1 to prepare a detailed design. An overview of the final game report will also be presented in class (see Assignment 4).
Weighting 30%
Length Approximately 25 pages
Due Date Week 11, Sunday 23:59 SGT, 28th July 2024
Submission Method Online
Assessment Criteria Provided on Canvas
Return Method Online
Feedback Provided Online - 2 weeks after submission/presentation.
Opportunity to Reattempt Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 3 - Research Awareness

Assessment Type	Tutorial / Laboratory Exercises
Purpose	Provides practical exposure to the conduct of research and user testing within a Human Research Ethics framework
Description	As part of your studies in INFT3950 Games Design you are expected to undertake a series of research awareness exercises. These exercises are designed to increase your awareness of the diversity of theory and research methodology in usability. These will include online or live research participation, and/or research readings.
Weighting	10%
Length	See Specifications on Canvas.
Due Date	Weeks 3-12, to be completed by 23:59 SGT, 4th August 2024
Submission Method	Online
Assessment Criteria	Provided on Canvas
Return Method	Online
Feedback Provided	Online - Ongoing assessment item.
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 4 - Game Design Presentation

Assessment Type	Presentation
Purpose	Present your design report ready for production as an engaging presentation.
Description	In this assignment, students (either individually or in a pair) will present a game design document based on industry-accepted requirements. Drawing on the theoretical course content provided in lectures, and the practical game design skills developed during tutorials, students will expand and elaborate on their initial game design concept from Assignment 1 and 2 to prepare a detailed design which is presented in class.
Weighting	40%
Compulsory Requirements	Pass requirement 40% - Must obtain 40% in this assessment item to pass the course.
Length	See Canvas for Specifications
Due Date	Presented in Weeks 11 and 12 of the course.
Submission Method	Online
Assessment Criteria	Provided on Canvas
Return Method	Online
Feedback Provided	Online - 2 weeks after submission/presentation.
Opportunity to Reattempt	Students WILL be given the opportunity to reattempt this assessment.

ADDITIONAL INFORMATION

Grading Scheme This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an

		adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Communication Methods

Communication methods used in this course include:
- Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.
- Email: Students will receive communications via their student email account.
- Face to Face: Communication will be provided via face to face meetings or supervision.

Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

Oral Interviews (Vivas)

As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the Oral Examination (viva) Procedure. In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the Student Conduct Rule.

Academic Misconduct

All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to https://policies.newcastle.edu.au/document/view-current.php?id=35.

Adverse Circumstances

The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:

1. the assessment item is a major assessment item; or
2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;
3. you are requesting a change of placement; or
4. the course has a compulsory attendance requirement.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:
https://policies.newcastle.edu.au/document/view-current.php?id=236.

Important Policy Information

The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures that support a safe and respectful environment at the University.

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

Graduate Profile Statement

The following table illustrates how this course contributes towards building the skills students will need to work in their profession.

Level of capability

- Level 1 indicates an introduction to a topic at a university level
- Levels 2 and 3 indicate progressive reinforcement of that topic
- Level 4 indicates skills commensurate with a graduate – entry to professional practice

	University of Newcastle Bachelor of Information Technology Graduate Profile Statement	**Taught**	**Practised**	**Assessed**	**Level of capability**
1	Demonstrate a comprehensive understanding of the discipline of information technologies with an emphasis on net-centric applications, information management, and user requirements for ethical professional practice.	X	X		2
2	Apply critical reasoning and systems thinking to understand and support the operation and constraints of contemporary enterprises and their dynamic environment.	X	X	X	2
3	Work independently and collaboratively to locate, manage and organise information and resources and apply evidence-based methodologies to create, modify and maintain designs and design solutions.	X	X	X	3
4	Use creativity, problem solving skills, project management skills and technical expertise to analyse, interpret, evaluate and generate solutions to complex technical and organisational problems.	X	X	X	3
5	Demonstrate professional judgement and responsibility by communicating information technology principles, practices, standards to specialist and non-specialist audience clearly and persuasively.	X	X	X	4