DGTL12016 *3D Character Animation*
Term 2 - 2020

All details in this unit profile for DGTL12016 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
This unit of study provides an introduction to three-dimensional (3D) character animation theory, principles and practices. You will learn how to use a variety of tools and techniques to apply the principles of animation to 3D characters. You will develop the necessary skills to produce animated 3D characters for animation, visual effects and games using industry-standard software.

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 Foundations of Animation
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 2 - 2020

- Brisbane
- Bundaberg
- Mackay
- Online
- 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 Assessment**
Weighting: 30%
2. **Practical Assessment**
Weighting: 30%
3. **Practical Assessment**
Weighting: 40%

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.

Unit Learning Outcomes

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

1. Apply the principles of animation to 3D character rigs
2. Produce 3D character animation using industry-standard software
3. Produce 3D character animation using best practice, including producing reference material, meeting milestone deadlines and incorporating feedback
4. Analyse and critique character animation.

Not applicable

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
1 - Practical Assessment - 30%		•		
2 - Practical Assessment - 30%	•			
3 - Practical Assessment - 40%	•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
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 Assessment - 30%		•				•				
2 - Practical Assessment - 30%		•	•	•		•				
3 - Practical Assessment - 40%	•	•	•	•	•	•	•	•		

Textbooks and Resources

Textbooks
DGTL12016

Prescribed

The Animator's Survival Kit: A Manual of Methods, Principles, and Formulas for Classical, Computer, Games, Stop Motion, and Internet Animators
Edition: 1st (2001)
Authors: Williams, Richard
Faber & Faber
London , UK
ISBN: 0-5712-0228-4
Binding: Paperback

Additional Textbook Information
Copies are available for purchase at the CQUni Bookshop 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 Photoshop CC
- Google Chrome
- Graphics Tablet (Recommended)
- Autodesk Maya

Referencing Style

All submissions for this unit must use the referencing style: Harvard (author-date)
For further information, see the Assessment Tasks.

Teaching Contacts

Andrew Martin Unit Coordinator
a.martin@cqu.edu.au

Schedule

Week 1 - 13 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Unit Overview **Theory of Character Animation:** What is Character Animation? **Practice of Character Animation:** Process Overview	**The Animator's Survival Kit:** Pages: 35-45, 84-95, 273-284	

Week 2 - 20 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Theory of Character Animation: Basic Physics (Mass and Gravity) **Practice of Character Animation:** Keys and Graph Editors	**The Animator's Survival Kit:** Pages: 256-269, 46-69 **Physics for Animators:** https://tinyurl.com/ybqymw9r, https://tinyurl.com/y9s8myee **Action Analysis for Animators:** https://tinyurl.com/yaw5rbsf	

Week 3 - 27 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Theory of Character Animation: Basic Anatomy (Joints and Muscles) **Practice of Character Animation:** Planning	**Animation Salvation:** https://tinyurl.com/y75dfuk6 **Action Analysis for Animators:** https://tinyurl.com/y8z2au8k (Stop at "Movement Given to One's Own Body")	

Week 4 - 03 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Theory of Character Animation: Body Mechanics 1 (Walks) **Practice of Character Animation:** Blocking	**The Animator's Survival Kit:** Pages: 102-117, 120-123, 136-139, 142, 146-153	

Week 5 - 10 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Theory of Character Animation: Body Mechanics 2 (Runs, Jumps, Lifts, etc.) **Practice of Character Animation:** Splining and Polishing	**The Animator's Survival Kit:** Pages: 176-200, 209-216, 257-263, 266-268	**Tutorial Exercises 1 and Character Animation Pitch** Due: Week 5 Monday (10 Aug 2020) 11:00 pm AEST

Vacation Week - 17 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 24 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Theory of Character Animation: Personality and Character **Practice of Character Animation:** Tips and Tricks (Asymmetry, Framing, Silhouette, Offset Keys, etc.) and Interacting with Objects	**The Animator's Survival Kit:** Pages: 251, 297-302, 315-325	

Week 7 - 31 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
'Weeklies' (Assessment 2: Planning)	**No Readings**	

Week 8 - 07 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
'Weeklies' (Assessment 2: Planning)	**No Readings**	

Week 9 - 14 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
'Weeklies' (Assessment 3: Blocking)	**No Readings**	**Tutorial Exercises 2 and Character Animation Planning** Due: Week 9 Monday (14 Sept 2020) 11:00 pm AEST

Week 10 - 21 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
'Weeklies' (Assessment 3: Blocking)	**No Readings**	

Week 11 - 28 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
'Weeklies' (Assessment 3: Splining and Polishing)	**No Readings**	

Week 12 - 05 Oct 2020

Module/Topic	Chapter	Events and Submissions/Topic
'Weeklies' (Assessment 3: Splining and Polishing)	**No Readings**	

Review/Exam Week - 12 Oct 2020

Module/Topic	Chapter	Events and Submissions/Topic
		Character Animation Project Due: Review/Exam Week Monday (12 Oct 2020) 11:00 pm AEST

Exam Week - 19 Oct 2020

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Tutorial Exercises 1 and Character Animation Pitch

Assessment Type
Practical Assessment

Task Description
This assessment requires you to complete the Week 1, 2 and 3 tutorial exercises and compile them into a single video, complete a written pitch for your Character Animation Project (Assessment 3), and complete a written review for three (3) of your peers' pitches. The video and documents must adhere to the technical specifications and submission requirements specified in the assessment criteria. Video tutorials are provided to guide you through the process.

Please refer to the unit website (Moodle) for a detailed assessment description and criteria.

Assessment Due Date
Week 5 Monday (10 Aug 2020) 11:00 pm AEST

Return Date to Students
Week 6 Monday (24 Aug 2020)

Weighting
30%

Assessment Criteria
Adherence to technical specifications and submission requirements
Application of principles of animation
Competence with medium and/or software
Creativity and innovation
Effort and engagement
Communication (written)

Please refer to the unit website (Moodle) for detailed assessment criteria.

Referencing Style

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

Submission
Online

Submission Instructions
You must upload all three (3) deliverables directly to the unit website (Moodle).

Learning Outcomes Assessed

- Produce 3D character animation using industry-standard software

Graduate Attributes

- Problem Solving
- Information Technology Competence

2 Tutorial Exercises 2 and Character Animation Planning

Assessment Type
Practical Assessment

Task Description
This assessment requires you to complete the Week 4, 5 and 6 tutorial exercises and compile them into a single video, complete planning for your Character Animation Project (Assessment 3), and complete a written review for three (3) of your peers' planning. The video and documents must adhere to the technical specifications and submission requirements specified in the assessment criteria. Video tutorials are provided to guide you through the process.

Please refer to the unit website (Moodle) for a detailed assessment description and criteria.

Assessment Due Date
Week 9 Monday (14 Sept 2020) 11:00 pm AEST

Return Date to Students
Week 11 Monday (28 Sept 2020)

Weighting
30%

Assessment Criteria
Adherence to technical specifications and submission requirements
Application of principles of animation
Competence with medium and/or software
Creativity and innovation
Effort and engagement
Communication (written and visual)

Please refer to the unit website (Moodle) for detailed assessment criteria.

Referencing Style

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

Submission
Online

Submission Instructions
You must upload all four (4) deliverables directly to the unit website (Moodle).

Learning Outcomes Assessed

- Apply the principles of animation to 3D character rigs

Graduate Attributes

- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

3 Character Animation Project

Assessment Type
Practical Assessment

Task Description
This assessment requires you to complete character animation for three (3) character actions using the 3D character rig provided, and complete a written review for three (3) of your peers' character animation progress each week during its production.

Please refer to the unit website (Moodle) for a detailed assessment description and criteria.

Assessment Due Date
Review/Exam Week Monday (12 Oct 2020) 11:00 pm AEST

Return Date to Students
Exam Week Friday (23 Oct 2020)

Weighting
40%

Assessment Criteria
Adherence to technical specifications and submission requirements
Application of principles of animation
Competence with medium and/or software
Creativity and innovation
Effort and engagement
Communication (written)

Please refer to the unit website (Moodle) for detailed assessment criteria.

Referencing Style

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

Submission
Online

Submission Instructions
You must upload all two (2) deliverables directly to the unit website (Moodle).

Learning Outcomes Assessed

- Apply the principles of animation to 3D character rigs
- Produce 3D character animation using industry-standard software
- Produce 3D character animation using best practice, including producing reference material, meeting milestone deadlines and incorporating feedback
- Analyse and critique character animation.

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