# KNB205 Digital Creatures and Characters

To view more information for this unit, select Unit Outline from the list below. Please note the teaching period for which the Unit Outline is relevant.

Unit Outline: Semester 1 2026, Kelvin Grove, Internal

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| **Unit code:** | KNB205 |
| **Credit points:** | 12 |
| **Equivalent:** | KNB217 |
| **Assumed Knowledge:** | Content within this unit assumes fundamental knowledge and experience in 3d modelling, texturing and creation of real-time environments. |
| **Coordinator:** | Maria Zelenskaya \| maria.zelenskaya@qut.edu.au |

## Overview

Animated characters and creatures have captivated audiences across all forms of content they generate empathy and emotions and are key to storytelling within animated contexts. This unit explores what an Animated character is, and what they are composed of within the contexts of emerging concepts and methods of animated production. This unit will empower you to create the next generation of virtual characters through a study of the practice of designing, creating and presenting compelling and memorable animated characters, that communicate their story and personality through their design. We will also discuss the importance of cultural sensitivity in character design and how to create characters that are authentic and respectful of different cultures and traditions. The content of this unit forms a key part of the animator's tool kit giving you a command of the virtual entities you manipulate as part of the animation process.

## Learning Outcomes

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

1. Identify and synthesise knowledge of design development processes and methodologies to character visualisations within narrative contexts.
2. Apply knowledge and techniques of advanced 3D character creation to the iterative development of a 3D character within a narrative context.
3. Demonstrate ethical judgement, professionalism and respect for social and cultural differences throughout the design and critique processes.
4. Demonstrate initiative and complex problem solving throughout the iterative development of a 3D character within a narrative context.

## Content

The content of this unit provides a historical and theoretical context for human form representation in visual narratives from cave paintings to modern art and cinematography while also building your ability to create virtual characters for use in animation. Students will be introduced to Indigenous protocols for working respectfully with cultural content. You will dive into what makes good character design, a narratively contextualised design process for 3D characters, advanced 3D modelling and sculpting techniques, 3d rigging Systems for body and facial animation, and effects such as cloth and fur. Furthermore, the unit's content explores emerging techniques and concepts of virtual characters within the context of live-action animation, virtual production and Artificial intelligence.

## Learning Approaches

In this unit, you will learn by engaging in the following:

lectures will provide theoretical, cultural and contextual frameworks for animation studies, and tutorials will focus on critical discussion and analysis of key texts, animation works and practices. In applied practice tutorials, you will develop creative works to explore aspects of animation production and benefit from feedback on works in progress through individual and group critiques.

## Feedback on Learning and Assessment

You will gain progressive feedback in this unit by participating in regular reviews and critiques with academics and peers, discussing writing and animation work in development. You will also receive written feedback on your assessments.

# Assessment

## Overview

The assessment for the unit centres around the development of a single detailed dynamic character presented within the context of a real-time environment. There are three assessment tasks. The first is a study of a character design. The second assessment requires you to design and model a character form. In the third assessment you will rig, animate and professionally present your character.

## Unit Grading Scheme

7- point scale

## Assessment Tasks

### Assessment: Character Design Language Analysis

Short essay critically analysing the design language and its contextual relations of a character in an animated film of your choice.

This assignment is eligible for the 48-hour late submission period and assignment extensions.

**Weight:** 20
**Length:** 1000 words
**Individual/Group:** Individual
**Due (indicative):** Week 4
**Related Unit learning outcomes:** 1, 3

## Assessment: 3D Character Development and Design

Research, design, and create a 3D character form for use in an animated production process, while also documenting the iteration of your development process in an annotated workbook.

This assignment is eligible for the 48-hour late submission period and assignment extensions.

**Weight:** 30
**Length:** Duration defined by complexity negotiated according to the brief.
**Individual/Group:** Individual
**Due (indicative):** Week 7
**Related Unit learning outcomes:** 1, 2, 3, 4

## Assessment: Character Rigging for Presentation

Enable a virtual character to be animated through the creation of a 3D character rig and present your character animated within a virtual environment and document your processes in an annotated workbook.

This assignment is eligible for the 48-hour late submission period and assignment extensions.

**Weight:** 50
**Length:** Duration defined by complexity negotiated according to the brief.
**Individual/Group:** Individual
**Due (indicative):** Week 13
**Related Unit learning outcomes:** 1, 2, 3, 4

# Academic Integrity

Academic integrity is a commitment to undertaking academic work and assessment in a manner that is ethical, fair, honest, respectful and accountable.

The Academic Integrity Policy sets out the range of conduct that can be a failure to maintain the standards of academic integrity. This includes, cheating in exams, plagiarism, self-plagiarism, collusion and contract cheating. It also includes providing fraudulent or altered documentation in support of an academic concession application, for example an assignment extension or a deferred exam.

You are encouraged to make use of QUT's learning support services, resources and tools to assure the academic integrity of your assessment. This includes the use of text matching software that may be available to assist with self-assessing your academic integrity as part of the assessment submission process.

Breaching QUT's Academic Integrity Policy or engaging in conduct that may defeat or compromise the purpose of assessment can lead to a finding of student misconduct (Code of Conduct – Student) and result in the imposition of penalties under the Management of Student Misconduct Policy, ranging from a grade reduction to exclusion from QUT.

# Requirements to Study

## Requirements

All students are requested to visit and review the Health and Safety information on the HiQ web pages (CIESJ Tier 1 HSE requirement).

You will be advised if you are required to complete a Tier 2 CIESJ Health and Safety Induction which is provided by the technician on site in the theatre, workshop or studio, or a Tier 3 CIESJ Health and Safety Induction which is a hands on induction on specific machinery.

This unit involves substantial computer-based work. You are advised to take regular rest breaks when engaging in prolonged computer-based work, and ensure that your workstation is set up for optimal comfort to prevent strain or injury.

## Costs

In this unit you may be required to use a WACOM CINTIQ tablet pen (approx. $170). (Staff will advise on suitable version/model in Week 1.) There are a limited number of pens supplied but students are advised to purchase their own.

# Resources

Additional resources are also available through the Canvas site for this unit.

24-hour computer labs are accessible - on campus – during term time.

## Resource Materials

### Recommended text(s)


Assaf, E. (2015). *Rigging for Games : A Primer for Technical Artists Using Maya and Python.* (1st ed.). CRC Press LLC.

Bridgman, G. B. (1971). *The book of a hundred hands.* Dover Publications.

Bridgman, G. B., & Pinchot, B. (2005). *Drawing the female form*. Dover.

Ellenberger, W., Baum, H. J., Dittrich, H., Brown, L. S., & Dittrich, H. (Hermann). (1956). *An atlas of animal anatomy for artists* (L. S. Brown, Ed.; Second Revised and Expanded Edition / edited by Lewis S. Brown.). Dover Publications.

Funke, J., & Grove, J. (2019). *Sculpture, Sexuality and History Encounters in Literature, Culture and the Arts from the Eighteenth Century to the Present* (J. Funke & J. Grove, Eds.; 1st ed. 2019.). Springer International Publishing. https://doi.org/10.1007/978-3-319-95840-8

Goldfinger, E. (2004). *Animal anatomy for artists the elements of form*. Oxford University Press.

Miller, S. (2000). Sculpture and Art History. *Art History*, *23*(4), 633–638. https://doi.org/10.1111/1467-8365.00231

Monsters in the movies; 100 years of cinematic nightmares. (2012). *Reference & Research Book News*, *27*(4). Ringgold, Inc.

O'Hailey, T. (2013). *Rig it right!: Maya animation rigging concepts*. Focal Press.

Schider, F., Auerbach, M., Wolf, B., & Lenssen, H. (1957). *An atlas of anatomy for artists* (M. Auerbach, Ed.; B. Wolf, Trans.; Third American edition.). Dover Publications, Inc.

## Software

ZBrush, Core 3d sculpting software

Epic Unreal Engine, Real-time engine used in presenting and creating outcomes in the unit.

Autodesk Maya, used for character rigging.

## Other

Wacom cintiq tablet pens (to be advised by teaching staff)