

Module Code	ACCA7038
Title	Animation Alchemy and Motion
Date	17/05/2024
Level	7
Credits	20
Pre-Requisites	None
DBS Check	May be required ☐ Not required ☒

AIM(S)

- To provide students with the underpinning knowledge and essential forms in approaching animation, across a wide variety of techniques and software, by examining the principles and their use in the creation and interpretation within animated sequences.

LEARNING OUTCOMES

Upon the successful completion of this module, the student should be able to:

- demonstrate originality and animation proficiency to create professional and engaging representation of the principles, character persona, animal behaviour and natural forces;
- demonstrate advanced mastery and control of the development tools necessary for the creation of modern animation and motions.

INDICATIVE CONTENT

- Observational analysis and life drawing (via poses, photography, film etc).
- Principles of Animation/Character Animation (e.g. pose to pose, slow-in, slow-out, etc).
- Classical animation methods + 2D/3D digital techniques (e.g. via the production studio system roles).
- Sound design for VFX and animation
- Model sheets and expression sheets.
- Key poses/gestures and acting/staging ideas and storyboarding.
- Animated cycles, key poses/gestures and acting/staging ideas.
- Timing for animation; screen/interactive timing.
- An appreciation of forces and Newton's laws of motion.
- Environmental conditions and forces (e.g. gravity, friction, inertia).
- Scene / environmental considerations and their influence upon the action of characters in scenes.

- An adoption of displaying weight and force and gravity – and how they influence performance/styles of character.
- Human and creature body mechanics, and animated turntables/moves in 3D space.
- Timing for animation; screen/interactive planning, co-ordination and timing.
- Body mechanics, and animated turntables/moves in 3D space.
- Anatomical studies and illustrations; human and animal biophysical motion studies.
- Theoretical input will also cover topics related to the underpinning science and biophysical foundations of motion across life.
- Use of emerging technologies in animation

Study Time Allocation

The study time for the module is divided as follows:

Activity type	Hours	Percentage
Scheduled learning	48	24%
Independent learning	152	76%
Placement learning	0	0%
TOTAL	200	100%

ASSESSMENT

Assessment Component 1

(Tick one)

☐ Written exam ☒ Coursework ☐ Practical

Mode of assessment	Volume	Weighting
Coursework	Individual Presentation (15 minutes) showcasing animation reel portfolio.	100%

Assessment Summary

Activity type	Percentage
Written exam	0%
Coursework	100%
Practical	0%
TOTAL	100%

INDICATIVE READING LIST

Module Code	ACCA7038	
Module Title	Animation Alchemy and Motion	
Classification	Reading List entry	Electronic*
Essential	Murdock, K. L. (2022), Autodesk Maya 2023 Basics Guide. SDC Publications.	☐
Essential	John Lasseter, (1987) "Principles of Traditional Animation Applied to 3D Computer Animation", Computer Graphics, pp. 35-44, 21:4, July 1987 (SIGGRAPH 87).	☒
Essential	Parr, P. (2018), Sketching for Animation: Developing Ideas, Characters and Layouts for your Sketchbook. Bloomsbury Academic.	☐
Essential	Legasi, C. (2015), Anatomy for 3D Artists: The Essential Guide for CG Professionals. 3D Total Publishing.	☐
Essential	Gilland, J. (2015), Elemental Magic: The Art of Special Effects Animation. Routledge.	☐
Essential	Williams, R. (2012), The Animator's Survival Kit: Expanded Edition. Faber & Faber.	☐
Essential	Beiman, N (2015) Animated Performance: Bringing Imaginary Animal, Human and Fantasy Characters to Life, Fairchild Books	☐
Further	Kothenschulte, D. (2022), The Walt Disney Film Archives: The Animated Movies 1921 – 1968. Taschen.	☐
Further	Meyer, T. & Meyer C. (2018), Creating Motion Graphics with After Effects: Essential and Advanced Techniques. Routledge.	☐
Further	Roberts, S. (2021), Animation Techniques. The Crowood Press.	☐
Further	Kundert-Gibbs, J., (2009) Action! Acting Lessons for CG Animators, John Wiley & Sons.	☐
Further	Mattesi, M (2017) FORCE: Dynamic Life Drawing, CRC Press.	☐
Further	Ed Hooks (Acting for Animation): http://www.edhooks.com/archives.html	☒
Further	Living Lines Library: https://livlily.blogspot.com/	☒
Further	50 most influential Animators: https://50mostinfluentialdisneyanimators.wordpress.com/	☒
Further	Animation World Network: https://www.awn.com/	☒