

MA 3DCA Module Guide:

Post Production:

Code: AGDG7007

Module value 10 credits

(Revised 08-02-2019)



A composited effects shot from Channel 4's "Extraterrestrial".

From Programme Document (2018):

AIM(S)

This module is designed to provide students with a comprehensive knowledge and understanding of individual image manipulation and complex effects sequences.

LEARNING OUTCOMES

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

- Deal with complex post-production problems both systematically and creatively to aesthetically combine sophisticated animation with visual effects sequences in a multi-layered composition.
- Use self-direction and originality when combining a variety of live-action and computer-generated audio-visual material to create and layer images and sequences for (final) digital output.

What is Post Production?

A literal explanation of the term “Post Production” would be “that which comes after production”, but the line between what is post and what is not, is blurred.

The type of post production can differ, depending on what type of production you are dealing with. A live action wild life documentary may have, graphics, editing, grading and sound dubbing as part of it's post production processes. In this case, it is what happens after the filming which constitutes post production.

In the case of 3D Computer Animation, it is what happens after the final 3D render which constitutes post production. This may still include some element of graphics, editing, grading and sound dubbing but more often than not, it will mainly consist of a large amount of compositing.

What is Compositing?

Compositing is the combining of visual elements from separate sources into single images, often to create the illusion that all those elements are parts of the same scene.

Why is Compositing needed?

A compositing application like “After Effects” or “Nuke” can achieve the following common processes.

Re-package a sequence by re-sizing the image format, re-coding or compressing into digital formats depending on what type of finish is required.

Layer different elements together by using alpha channels.

Build up elements from different passes supplied from the 3D render process.

Incorporate live action as part of the layering process.

Can separate passes from elements by using chroma, luminance or difference keying.

Incorporate additional 2D graphics including typography and images and as part of the layering process.

Incorporate additional 2D and 3D effects as part of the layering process.

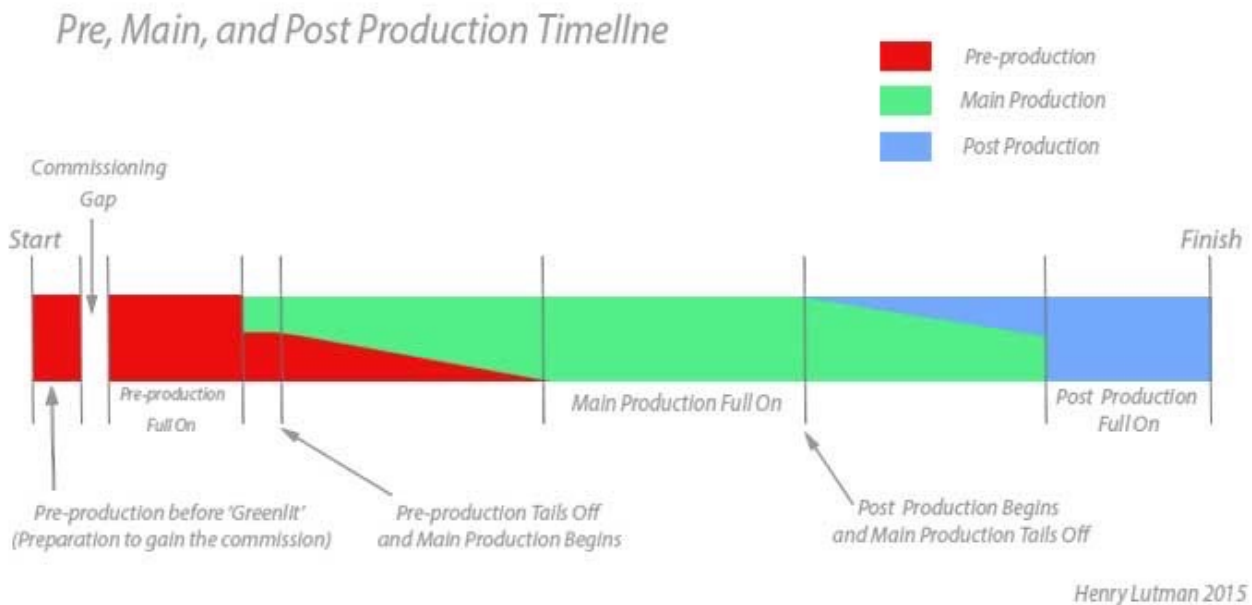
Introduce additional motion to elements.

Incorporate sophisticated static or dynamic visual effects.
Grade a sequence by the use of colour and other filtering techniques.

Blurring of the borders between Pre Post & Production execution.

Within a production, when does production stop and post production start?

With regard to 3D computer animation there usually is no definitive point where one stops and the other starts. If you look at the image below, you can see that both pre-production and post production (represented in blue) usually overlap, to a lesser or greater extent, depending on the type of project.



What you will be learning.

You will learn how to prepare surface attributes of simple objects within a MAYA scene file with a view of getting the very best results for the compositing process. You will introduce layers to separate the objects in the rendering process. You will introduce separate passes to enable enhanced control in the compositing process.

You will learn about anti-aliasing produced by the 3D renderer and how it can cause conflict in the compositing process.

You will learn how the pre-multiplied alpha channel works and how it can be controlled or re-routed when layers are placed together.

You currently have two choices.

You have two assignments to choose from. Choose only one. The overview of each follows in these articles recently published in the South Wales Argus: -

The Reign of Fire:

A dragon was seen terrorising tourists around the shores of Portmeirion and panic soon ensued. "I lost the hairs on my head", said one lady who was out walking with a friend.

The Bloreng Monolith:

This is a newly installed artwork has not pleased everybody. "It has spoiled our favourite walk", said Mrs. Thomas, while art historian Dr. Miles Thorpanhope thought it "added to the cultural heritage of the landscape".

Supporting Web Material:

Currently, there is no supporting web material on the Learning Animation Site for this module.

Weekly Activities:

Week No:	Lecture / Tutorial	Practical Studio Work
	The lecturer demonstrates and explains the practical and creative aspects of the topics listed below,	This is where you work on your own in the studio on the activities listed below and the lecturer will help you if you need it.
Week 1: 31st Jan	The elements of compositing. Alpha channels and routing.	Experiment with compositing.
Week 2:	Depth map production	Experiment with depth maps
Week 3:	Prepping Surface attributes for compositing.	Experiment with Surface attributes.
Week 4:	Prepping Surface attributes for compositing.	Experiment with Surface attributes.
Week 5:	Prepping Surface attributes for compositing.	Experiment with Surface attributes.
Week 6:	Preparing layers and passes	Experiment with layers and passes.
Week 7:	Render Analysis of Assignment:	Experiment with the render.
Week 8:	Full Analysis of Assignment: "The Reign of fire." and "The Bloreng Monolith"	Your Own Practical Studio time.

Week 9:	Experimenting with the project.	Your Own Practical Studio time
BREAK	No lectures or Tutorials	Your Own Practical Studio time
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Week 10:	Guidance on Assignment Completion	Your Own Practical Studio time
Week 11:	Guidance on Assignment Completion	Your Own Practical Studio time
Week 12:	Guidance on Assignment Completion	Your Own Practical Studio time
Week 13:	Assessment Presentations.	The Presentation of your Post Prod. Exercises.

Reading Lists:

Essential Texts

Author	Date	Title	Publisher
Wright, S.	2017	Digital Compositing for Film and Video: Production Workflows and Techniques, 4 edition.	Focal Press, New York.

Background Reading

Author	Date	Title	Publisher
Lutman, R		http://www.learninganimation.co.uk/	WWW
Brinkmann, R.	2008	The Art and Science of Digital Compositing: Techniques for Visual Effects, Animation and Motion Graphics, 2 edition.	Morgan Kaufmann, Amsterdam ; Boston.

Finally:

Don't forget to ask your tutor if you are not sure about any issue or topic on this Module Guide or any issue arising from the Assignment Specification.

Can I ask a question at any time?

Yes, even during assessments.

I don't like asking questions because:-

I will look stupid in front of my Colleagues.

Your colleagues may want to ask the same question but are too shy to do so.

Although it is nice to demand the respect of your colleagues, it doesn't really matter what they think of you at this stage of the programme.

I don't like asking questions because:-

I will look stupid in front of my Tutor and he /she will not give me good marks.

Not true. If you ask questions it means that you are awake and are listening.