


Course Outline	
MDIA6020 Digital Compositing I (4)	
Effective Date 01 February 2017	Study Program Visual Communication Design Revision 1

1. Course Description

This course is given to approach visual technique in graphic design, animation and visual effect which can be applied to video/movie production.

2. Graduate Competency

Each course in the study program contributes to the graduate competencies that are divided into employability and entrepreneurial skills and study program specific outcomes, in which students need to have demonstrated by the time they complete their course.

BINUS University employability and entrepreneurial skills consist of planning and organizing, problem solving and decision making, self management, team work, communication, and initiative and enterprise.

2.1. Employability and Entrepreneurial Skills

Aspect	Key Behaviour

2.2. Study Program Specific Outcomes

Study Program Specific Outcomes
(SO-2 AN) - Able to overcome the problems in mass communication, education or entertainment through the process of creating animation with aesthetic and innovative.
(SO-3 AN) - Able to analyze the efficiency level of resource utilization, engineering, technology, and time in the process of creation without changing the essence and aesthetic design.
(SO-6 AN) - Able to design animation product with sale value and recognition of copyright (intellectual property) by applied principle design and technology in design process.

3. Topics

- Digital Compositing Application in post production process
- Layer base and node base in composition workflow
- Multi layer composition based on lighting and camera theory
- Rigging hierarchy, layer based 2D Character with parent & child in composition
- Approaches Keyframe for animation and Curve
- 3D compositing
- 3D camera in compositing scene
- 3D Motion Graphic & Particles in After Effects
- 3D Layers Projection Camera in After Effects
- Creative Visual Effect
- Experimental media and live action
- Compositing skills in the industry
- Colour Correction for better quality improvement

4. Learning Outcomes

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

- LO 1: Identify process of footages in video production
- LO 2: Explain Explain 2D motion artwork with compositing technique
- LO 3: Apply 2D motion artwork combine with keying method in compositing technique
- LO 4: Create 3D motion artwork with all method in compositing technique.

5. Teaching And Learning Strategies

In this course, the lecturers might deploy several teaching learning strategies, including case studies, Discussion, Demonstrate methods or procedures, and Practice Activities.

6. Textbooks and Other Resources

6.1 Textbooks

1. Adobe Creative team. (2012). *Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system*. 01. Adobe Press. California. ISBN: 9780321822437.

The book in the first list is a must to have for each student.

6.2 Other Resources

1. <http://lmscontent.binus.ac.id/digitalcontent/z1371%20Digicomp%201.rar>
2. <http://thecreatorsproject.vice.com/blog/filmmaker-bends-reality-in-an-experimental-animated-live-action-short>
3. <http://motiongraphics.nu/category/after-effects/>
4. <http://tv.adobe.com/watch/adobe-at-nab-2014/after-effects-cc-whats-new/>
5. <http://www.adobepress.com/articles/article.asp?p=1661081&seqNum=7>
6. <http://wolfcrow.com/blog/layer-based-vs-node-based-compositing/>
7. <http://www.thehurlblog.com/cinematography-online-7-tips-for-hd-color-correction-and-dslr-color-correction/>
8. <https://cgi.tutsplus.com/articles/16-killer-motion-graphics-demo-reels--ae-1681>
9. <https://rainboxprod.coop/en/tools/>
10. <http://www.thrivedigitalvisuals.com/compositing.php#main>
11. <http://greyscalegorilla.com/2010/09/motion-graphics-music-video-gettin-money-with-a-mouse-and-a-wacom-pen/>
12. <https://www.rocketstock.com/blog/8-methods-for-color-grading-in-after-effects/>
13. <http://www.cgsource.net/render-passes--compositing.html>
14. http://www.videocopilot.net/tutorials/3d_camera_projection_2/
15. <http://empac.rpi.edu/events/2015/spring/animation-and-workflow/animation-and-workflow>
16. <https://www.thefoundry.co.uk/products/nuke/about-digital-compositing/>
17. http://www.videocopilot.net/tutorials/3d_compositing/
18. <https://helpx.adobe.com/after-effects/using/keyframe-interpolation.html>
19. <http://motionographer.com/tag/vfx/>
20. <http://greyscalegorilla.com/tutorials/the-importance-of-compositing-a-layer-by-layer-breakdown-in-after-effects/>
21. <http://www.andrew-whitehurst.net/pipeline.html>
22. http://www.videocopilot.net/tutorials/advanced_camera_tips/
23. <https://helpx.adobe.com/after-effects/using/animation-basics.html>
24. http://www.videocopilot.net/tutorials/3d_camera_projection/

7. Schedule

Theory

Session/ Mode	Related LO	Topics	References
1 F2F	LO 1 LO 2	Digital Compositing Application in post production process - Digital Compositing enhanced for final art - schematic workflow in Digital compositing process	- Digital Compositing Application in post production process.ppt - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, bab 1 page 8 - BuyFree 15-day trialNon-commercial use10.0v4 Pricing & licensing Product downloads Maintenance User guides Syste, https://www.thefoundry.co.uk/products/nuke/about-digital-compositing/
2 F2F	LO 1 LO 2	Digital Compositing Application in post production process - Digital Compositing enhanced for final art - schematic workflow in Digital compositing process	- Digital Compositing Application in post production process.ppt - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, bab 1 page 8 - Buy Free 15-day trial Non-commercial use 10.0v4 Pricing & licensing Product downloads Maintenance User guides Syste, https://www.thefoundry.co.uk/products/nuke/about-digital-compositing/
3 F2F	LO 1 LO 2	Layer base and node base in composition workflow - Differentiation between layer base and node base workflow - Layer Base project and track-matte composition	- Layer base and node base in composition workflow 2nd meeting - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 1 page 15 - Layer base and node base in composition workflow 2nd meeting, http://wolfcrow.com/blog/layer-based-vs-node-based-compositing/
4 F2F	LO 1 LO 2	Layer base and node base in composition workflow - Differentiation between layer base and node base workflow - Layer Base project and track-matte composition	- Layer base and node base in composition workflow 2nd meeting - Adobe After Effects CS 6 Classroom in a Book : the

			<p>official training workbook from adobe system, chapter 1 page 15</p> <ul style="list-style-type: none"> - Layer base and node base in composition workflow 2nd meeting, http://wolfcrow.com/blog/layer-based-vs-node-based-compositing/
5 F2F	LO 1 LO 2	<p>Multi layer composition based on lighting and camera theory</p> <ul style="list-style-type: none"> - Composite different source assets layer based on its properties - Composite multiple layers based on cinematography theory 	<ul style="list-style-type: none"> - Multi layer composition based on lighting and camera theory. - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, bab 6 page 150 - Digital Compositing, http://www.thrivedigitalvisuals.com/compositing.php#main - http://greyscalegorilla.com/tutorials/the-importance-of-compositing-a-layer-by-layer-breakdown-in-after-effects/, http://greyscalegorilla.com/tutorials/the-importance-of-compositing-a-layer-by-layer-breakdown-in-after-effects/
6 F2F	LO 1 LO 2	<p>Multi layer composition based on lighting and camera theory</p> <ul style="list-style-type: none"> - Composite different source assets layer based on its properties - Composite multiple layers based on cinematography theory 	<ul style="list-style-type: none"> - Multi layer composition based on lighting and camera theory. - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, bab 6 page 150 - Digital Compositing, http://www.thrivedigitalvisuals.com/compositing.php#main - http://greyscalegorilla.com/tutorials/the-importance-of-compositing-a-layer-by-layer-breakdown-in-after-effects/, http://greyscalegorilla.com/tutorials/the-importance-of-compositing-a-layer-by-layer-breakdown-in-after-effects/
7 F2F	LO 2 LO 3	<p>Rigging hierarchy, layer based 2D Character with parent & child in composition</p> <ul style="list-style-type: none"> - define workflow for 2D Character rigging - Creating easier controller for defining element part of 2d Character 	<ul style="list-style-type: none"> - Rigging layer based character with parent and child - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 3 page 71 - After Effects tools, https://rainboxprod.coop/en/tools/

8 F2F	LO 2 LO 3	Rigging hierarchy, layer based 2D Character with parent & child in composition <ul style="list-style-type: none"> - define workflow for 2D Character rigging - Creating easier controller for defining element part of 2d Character 	<ul style="list-style-type: none"> - Rigging layer based character with parent and child - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 3 page 71 - After Effects tools, https://rainboxprod.coop/en/tools/
9 GSLC	LO 2 LO 3	Approaches Keyframe for animation and Curve <ul style="list-style-type: none"> - using graph editor for better translation - Proper Keyframing - Ease in, Ease out and Easy ease 	<ul style="list-style-type: none"> - Approaches Keyframe for animation and Curve - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 6 page 160 - Keyframe Interpolation, https://helpx.adobe.com/after-effects/using/keyframe-interpolation.html - About animation, keyframes, and expressions, https://helpx.adobe.com/after-effects/using/animation-basics.html
10 GSLC	LO 2 LO 3	Approaches Keyframe for animation and Curve <ul style="list-style-type: none"> - using graph editor for better translation - Proper Keyframing - Ease in, Ease out and Easy ease 	<ul style="list-style-type: none"> - Approaches Keyframe for animation and Curve - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 6 page 160 - Keyframe Interpolation, https://helpx.adobe.com/after-effects/using/keyframe-interpolation.html - About animation, keyframes, and expressions, https://helpx.adobe.com/after-effects/using/animation-basics.html
11 F2F	LO 1 LO 4	3D compositing <ul style="list-style-type: none"> - 3D Layer - Compositing 3D in After Effects - 3D Space 	<ul style="list-style-type: none"> - 3D compositing - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 10 page 244 - Render Passes and Compositing with 3ds Max, V-Ray and After Effects, http://www.cgsource.net/render-passes--compositing.html - 3d compositing, http://www.videocopilot.net/tutorials/3d_compositing/
12 F2F	LO 1 LO 4	3D compositing <ul style="list-style-type: none"> - 3D Layer - Compositing 3D in After Effects 	<ul style="list-style-type: none"> - 3D compositing - Adobe After Effects CS 6 Classroom in a Book : the

		- 3D Space	official training workbook from adobe system, chapter 10 page 244 - Render Passes and Compositing with 3ds Max, V-Ray and After Effects, http://www.cgsource.net/render-passes--compositing.html - 3d compositing, http://www.videocopilot.net/tutorials/3d_compositing/
13 F2F	LO 4	3D camera in compositing scene - Advanced 3D Compositing - Virtual Camera & Lighting	- 3D camera in compositing scene - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 12 page 296 - Building 3D Objects in Adobe After Effects CS5, http://www.adobepress.com/articles/article.asp?p=1661081&seqNum=7 - advance camera tips, http://www.videocopilot.net/tutorials/advanced_camera_tips/
14 F2F	LO 4	3D camera in compositing scene - Advanced 3D Compositing - Virtual Camera & Lighting	- 3D camera in compositing scene - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 12 page 296 - Building 3D Objects in Adobe After Effects CS5, http://www.adobepress.com/articles/article.asp?p=1661081&seqNum=7 - advance camera tips, http://www.videocopilot.net/tutorials/advanced_camera_tips/
15 GSLC	LO 4	3D Motion Graphic & Particles in After Effects - 3D Text - 3D Particle - 3D Graphic elements	- 3d Motion Graphic & Particle - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 11 page 288 - Digital Content - Particles, http://lmscontent.binus.ac.id/digitalcontent/z1371%20Digitalcomp%201.rar - After effects, http://motiongraphics.nu/category/after-effects/ - 16 Killer Motion Graphics Demo Reels, https://cgi.tutsplus.com/articles/16-killer-motion-graphics-

			<p>demo-reels--ae-1681</p> <ul style="list-style-type: none"> - Motion Graphics Music Video: Gettin' Money With a Mouse and a Wacom Pen, http://greyscalegorilla.com/2010/09/motion-graphics-music-video-gettin-money-with-a-mouse-and-a-wacom-pen/
16 GSLC	LO 4	3D Motion Graphic & Particles in After Effects <ul style="list-style-type: none"> - 3D Text - 3D Particle - 3D Graphic elements 	<ul style="list-style-type: none"> - 3d Motion Graphic & Particle - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 11 page 288 - Digital Content - Particles, http://lmscontent.binus.ac.id/digitalcontent/z1371%20DigiComp%201.rar - After effects, http://motiongraphics.nu/category/after-effects/ - 16 Killer Motion Graphics Demo Reels, https://cgi.tutsplus.com/articles/16-killer-motion-graphics-demo-reels--ae-1681 - Motion Graphics Music Video: Gettin' Money With a Mouse and a Wacom Pen, http://greyscalegorilla.com/2010/09/motion-graphics-music-video-gettin-money-with-a-mouse-and-a-wacom-pen/
17 F2F	LO 4	3D Layers Projection Camera in After Effects <ul style="list-style-type: none"> - 3D Vanishing Point - Transform a single image into 3D space - Construct a 3D room from still images 	<ul style="list-style-type: none"> - 3D Projection Camera - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 12 page 296 - 3D Projection Camera, http://www.videocopilot.net/tutorials/3d_camera_projection_2/ - 3D Projection Camera, http://www.videocopilot.net/tutorials/3d_camera_projection/
18 F2F	LO 4	3D Layers Projection Camera in After Effects <ul style="list-style-type: none"> - 3D Vanishing Point - Transform a single image into 3D space - Construct a 3D room from still images 	<ul style="list-style-type: none"> - 3D Projection Camera - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 12 page 296 - 3D Projection Camera, http://www.videocopilot.net/tutorials/3d_camera_projection_2/ - 3D Projection Camera,

			http://www.videocopilot.net/tutorials/3d_camera_projection/
19 F2F	LO 3 LO 4	Creative Visual Effect - Matte Painting - Virtual 3D photos - Speed Ramp	<ul style="list-style-type: none"> - Creative Visual Effect - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 4 page 114 - After Effects CC: What's New, http://tv.adobe.com/watch/adobe-at-nab-2014/after-effects-cc-whats-new/ - vfx, http://motionographer.com/tag/vfx/
20 F2F	LO 3 LO 4	Creative Visual Effect - Matte Painting - Virtual 3D photos - Speed Ramp	<ul style="list-style-type: none"> - Creative Visual Effect - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 4 page 114 - After Effects CC: What's New, http://tv.adobe.com/watch/adobe-at-nab-2014/after-effects-cc-whats-new/ - vfx, http://motionographer.com/tag/vfx/
21 F2F	LO 3 LO 4	Experimental media and live action - Paint Tools - Rotoscoping Animation	<ul style="list-style-type: none"> - Experimental media and live action in compositing - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 13 page 318 - On Animation and Workflow, http://empac.rpi.edu/events/2015/spring/animation-and-workflow/animation-and-workflow - Filmmaker Bends Reality in an Experimental Animated/Live Action Short, http://thecreatorsproject.vice.com/blog/filmmaker-bends-reality-in-an-experimental-animated-live-action-short
22 F2F	LO 3 LO 4	Experimental media and live action - Paint Tools - Rotoscoping Animation	<ul style="list-style-type: none"> - Experimental media and live action in compositing - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 13 page 318 - On Animation and Workflow, http://empac.rpi.edu/events/2015/spring/animation-and-workflow/animation-and-workflow

			<p>workflow/animation-and-workflow</p> <ul style="list-style-type: none"> - Filmmaker Bends Reality in an Experimental Animated/Live Action Short, http://thecreatorsproject.vice.com/blog/filmmaker-bends-reality-in-an-experimental-animated-live-action-short
23 F2F	LO 1 LO 2 LO 3 LO 4	<p>Compositing skills in the industry</p> <ul style="list-style-type: none"> - Alternative Compositing tools/comparisons 	<ul style="list-style-type: none"> - Compositing skills in the industry - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 13 & 14 - The Visual Effects Pipeline, http://www.andrew-whitehurst.net/pipeline.html
24 F2F	LO 1 LO 2 LO 3 LO 4	<p>Compositing skills in the industry</p> <ul style="list-style-type: none"> - Alternative Compositing tools/comparisons 	<ul style="list-style-type: none"> - Compositing skills in the industry - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 13 & 14 - The Visual Effects Pipeline, http://www.andrew-whitehurst.net/pipeline.html
25 F2F	LO 3 LO 4	<p>Colour Correction for better quality improvement</p> <ul style="list-style-type: none"> - Understanding resources assets for composition - colour correction for still image and video to achieve better exposure and quality 	<ul style="list-style-type: none"> - Colour Correction for better quality improvement - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 9 page 224 - 7 Tips for HD Color Correction and DSLR Color Correction, http://www.thehurlblog.com/cinematography-online-7-tips-for-hd-color-correction-and-dslr-color-correction/ - 8 Methods for Color Grading in After Effects, https://www.rocketstock.com/blog/8-methods-for-color-grading-in-after-effects/
26 F2F	LO 3 LO 4	<p>Colour Correction for better quality improvement</p> <ul style="list-style-type: none"> - Understanding resources assets for composition - colour correction for still image and video to achieve better exposure and quality 	<ul style="list-style-type: none"> - Colour Correction for better quality improvement - Adobe After Effects CS 6 Classroom in a Book : the official training workbook from adobe system, chapter 9 page 224 - 7 Tips for HD Color Correction and DSLR Color Correction, http://www.thehurlblog.com/c

			inematography-online-7-tips-for-hd-color-correction-and-dslr-color-correction/ - 8 Methods for Color Grading in After Effects, https://www.rocketstock.com/blog/8-methods-for-color-grading-in-after-effects/
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8. Evaluation

Theory

Assessment Activity	Weight	Learning Outcomes			
		1	2	3	4
Assignment	60%	√	√	√	√
Mid Exam	20%	√	√		
Final Exam	20%			√	√

Practicum

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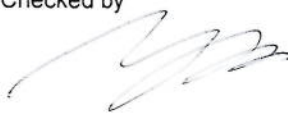


Final Evaluation Score

Aspects	Weight
Theory	100%
Practicum	0%

9. A. Assessment Rubric (Study Program Specific Outcomes)

LO	Indicators	Proficiency Level			
		Excellent (85 – 100)	Good (75 – 84)	Average (65 – 74)	Poor (<= 64)
LO 1	1.1. Ability to identify the properties of each resource assets & footages for its use.	identification of all properties for each resource assets & footages are correct	identification of all properties for each resource assets & footages has slightly error	identification all properties for each resource assets & footages are not complete	identification of all properties for each resource assets & footages are not correct
	1.2. Ability to explain how the process workflow of composite multilayers in compositing & treatment of each footage for compositing.	The students can explain and choosing the right workflow for composite multilayers and treatment of each footage for compositing.	The students can explain and choosing the right workflow for composite multilayers but have a slightly error treatment of each footages	The students only explaining the process workflow	The students can not explain the process workflow
LO 2	2.1. Ability to explain the order of layers in the correct order, blending each layer must be appropriate to the	All elements in indicator are correct	has a slightly error indicator in	Multi layers Composition don't match	All element in indicator have major

	lighting and camera theory, composition theory must conform to the rules third		one element description	with lighting & Camera theory	error or the student didn't finish the task
	2.2. Ability to explain Basic transformation for 2d compositing and its treatment.	Basic transformation for 2d compositing is precise and manipulated correctly.	The Student have slightly error in basic transformation on keyframing	The student can explain basic transformation but no treatment in its technique.	The student can not explain basic transformation in 2d compositing.
LO 3	3.1. Ability to explain Multi layer in 2D compositing combine with Keying technique must be correct in order, blending of each layer must be precise with lighting & Camera theory, footage Keying must have	All elements in indicator are correct.	has a slightly error indicator in creating track matte or keying process subject but Multi layers Composition match with lighting & Camera theory.	Multi layers Composition don't match with lighting & Camera theory and composition keying footage has a slightly error.	All element in indicator have major error or the student didn't finish the task
	3.2. Ability to choose the right technique for creating matte.	The technique for creating matte is appropriate and keying layers have clean matte	The keying layers have clean matte without applying matte technique combinations	The keying layers have slightly error clean matte and without applying matte technique combinations	The keying layers have dirty matte
LO 4	4.1. Ability to identify Multi layer in 3D layer compositing combine with Keying technique must be correct in order.	All elements in indicator are correct.	has a slightly error indicator in creating track matte or keying process subject which applied in 3D layer.	Application multi layer compositing in 3D layer Composition have dirty track matte	All element in indicator have major error or the student didn't finish the task
	4.2. Ability to combine Multi layer in 3D layer compositing blending of each layer must be precise with lighting & Camera theory, footage Keying must have clean track matte.	All elements in indicator are correct.	has a slightly error indicator in lighting & Camera which applied in 3D layer, but keying technique have clean track matte.	has a slightly error indicator in lighting & Camera which applied in 3D layer, and have dirty track matte.	All element in indicator have major error or the student didn't finish the task

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