


<b>Course Outline</b>	
<b>MDIA6022</b> <b>Digital Compositing II</b> <b>(3)</b>	
<b>Effective Date</b> 01 September 2016	<b>Study Program</b> Visual Communication Design <b>Revision 0</b>

### 1. Course Description

This course is focusing on greenscreen shot production and manipulation shot for visual effect which applied for Broadcast production, Television Commercial, Public Service Announcement and movie visual effect.

### 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.

### 3. Topics

- Visual Effects in industry and breakdown
- Greenscreen setup for VFX Production
- Camera Tracking and Match Movement
- Object Tracking in 3D Space
- Particles & Emitter
- 3D Matte Painting & Set Extension
- MultiPass Rendering & 3D Layering
- Dynamic Simulations
- Cloth Simulation
- Fluid FX
- Demolition & Pyro FX
- Liquid FX
- Performing color correction & Grading

### 4. Learning Outcomes

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

- LO 1: Explain the shot for visual effects certain concept.
- LO 2: Define camera work and greenscreen setup for visual effects production

- LO 3: Analyze integration between 3D software and compositing software for certain VFX Concept
- LO 4: Analyze 3D motion artwork or animation combine with visual effects shot.

## 5. Teaching And Learning Strategies

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

## 6. Textbooks and Other Resources

### 6.1 Textbooks

1. Christiansen, M.. (2013). *After Effects CS6 Visual Effects and Compositing Studio Techniques*. 01. Adobe Press. San Francisco. ISBN: 978-0-321-83459-1.
2. Susan Zwerman Jeffrey A. Okun. (2015). *The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures 2nd Edition*. 02. Focal Press. ISBN: 978-0240825182.
3. Murdock, K.L.. (2010). *3DS Max 2011 Bible*. 00. 1st Books Library. ISBN: 0470617772.

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

### 6.2 Other Resources

1. <http://https://http://www.youtube.com/watch?v=ptWxDIXE6hM>
2. <http://rayfirestudios.com/help/video-tutorials>
3. <http://www.digitaltutors.com/software/FumeFX-tutorials>
4. <https://http://www.youtube.com/watch?v=oilHp5IVnOQ>
5. <http://thevault.realflo.com/first10steps.php>
6. <http://tv.adobe.com/watch/learn-after-effects-cs6/color-keying/>
7. <https://http://www.youtube.com/watch?v=6tbu3iUtXtQ>
8. <http://www.artofvfx.com/>
9. [http://www.videocopilot.net/tutorials/depth\\_compositing/](http://www.videocopilot.net/tutorials/depth_compositing/)
10. <https://http://www.youtube.com/watch?v=EDGZPAKzvdA>
11. <http://docs.autodesk.com/3DSMAX/13/ENU/Autodesk%203ds%20Max%202011%20Help/index.html?url=.%20files/WSf742dab04106313366400bf6112a1cea097-7fac.htm,topicNumber=d0e58889>
12. [http://www.videocopilot.net/tutorials/advanced\\_sky\\_replacement/](http://www.videocopilot.net/tutorials/advanced_sky_replacement/)
13. <http://docs.autodesk.com/3DSMAX/13/ENU/Autodesk%203ds%20Max%202011%20Help/index.html?url=.%20files/WSf742dab041063133664ce93112a1ceaa7a-8000.htm,topicNumber=d0e218318>
14. <https://http://www.youtube.com/watch?v=oilHp5IVnOQ>

## 7. Schedule

### Theory

Session/ Mode	Related LO	Topics	References
1 F2F	LO 1 LO 2	Visual Effects in industry and breakdown - Visual effect Review - VFX Categories	- Visual Effects in industry and breakdown - After Effects CS6 Visual Effects and Compositing Studio Techniques, Section I Working Foundations - Visual Effects in industry and breakdown, <a href="http://www.artofvfx.com/">http://www.artofvfx.com/</a>
2 F2F	LO 1 LO 2	Visual Effects in industry and breakdown - Visual effect Review - VFX Categories	- Visual Effects in industry and breakdown - After Effects CS6 Visual Effects and Compositing Studio Techniques, Section I Working Foundations - Visual Effects in industry and breakdown, <a href="http://www.artofvfx.com/">http://www.artofvfx.com/</a>

3 F2F	LO 1 LO 2	Greenscreen setup for VFX Production - Green Screen Manipulation & Keying - Recomposing original plate	<ul style="list-style-type: none"> <li>- Greenscreen, Keying and shot manipulation</li> <li>- After Effects CS6 Visual Effects and Compositing Studio Techniques, Chapter 6 Color Keying</li> <li>- Color keying, <a href="http://tv.adobe.com/watch/learn-after-effects-cs6/color-keying/">http://tv.adobe.com/watch/learn-after-effects-cs6/color-keying/</a></li> </ul>
4 F2F	LO 1 LO 2	Greenscreen setup for VFX Production - Green Screen Manipulation & Keying - Recomposing original plate	<ul style="list-style-type: none"> <li>- Greenscreen, Keying and shot manipulation</li> <li>- After Effects CS6 Visual Effects and Compositing Studio Techniques, Chapter 6 Color Keying</li> <li>- Color keying, <a href="http://tv.adobe.com/watch/learn-after-effects-cs6/color-keying/">http://tv.adobe.com/watch/learn-after-effects-cs6/color-keying/</a></li> </ul>
5 F2F	LO 1 LO 2	Camera Tracking and Match Movement - Camera Track - Match movement	<ul style="list-style-type: none"> <li>- Camera Tracking and Match Movement</li> <li>- After Effects CS6 Visual Effects and Compositing Studio Techniques, Chapter 8 Effective Motion Tracking</li> <li>- GreenScreen setup, Keying dan 3D Camera Tracking, <a href="http://https://http://www.youtube.com/watch?v=ptWxDIXE6hM">http://https://http://www.youtube.com/watch?v=ptWxDIXE6hM</a></li> <li>- Camera tracking, <a href="https://http://www.youtube.com/watch?v=oilHp5IVnOQ">https://http://www.youtube.com/watch?v=oilHp5IVnOQ</a></li> </ul>
6 F2F	LO 1 LO 2	Camera Tracking and Match Movement - Camera Track - Match movement	<ul style="list-style-type: none"> <li>- Camera Tracking and Match Movement</li> <li>- After Effects CS6 Visual Effects and Compositing Studio Techniques, Chapter 8 Effective Motion Tracking</li> <li>- GreenScreen setup, Keying dan 3D Camera Tracking, <a href="http://https://http://www.youtube.com/watch?v=ptWxDIXE6hM">http://https://http://www.youtube.com/watch?v=ptWxDIXE6hM</a></li> <li>- Camera tracking, <a href="https://http://www.youtube.com/watch?v=oilHp5IVnOQ">https://http://www.youtube.com/watch?v=oilHp5IVnOQ</a></li> </ul>
7 F2F	LO 1 LO 2	Object Tracking in 3D Space - Object track point - Object tracking matching with footage tracked	<ul style="list-style-type: none"> <li>- Object Tracking in 3D Space</li> <li>- After Effects CS6 Visual Effects and Compositing Studio Techniques, chapter 8 effective motion</li> </ul>

			tracking, track a scene with 3d camera tracker - Camera tracking, <a href="https://http://www.youtube.com/watch?v=oilHp5lVnOQ">https://http://www.youtube.com/watch?v=oilHp5lVnOQ</a>
8 F2F	LO 1 LO 2	Object Tracking in 3D Space - Object track point - Object tracking matching with footage tracked	- Object Tracking in 3D Space - After Effects CS6 Visual Effects and Compositing Studio Techniques, chapter 8 effective motion tracking, track a scene with 3d camera tracker - Camera tracking, <a href="https://http://www.youtube.com/watch?v=oilHp5lVnOQ">https://http://www.youtube.com/watch?v=oilHp5lVnOQ</a>
9 GSLC	LO 1 LO 2	Particles & Emitter - Particle simulation - Shot manipulation with particle	- Particle & Emitter - After Effects CS6 Visual Effects and Compositing Studio Techniques, Chapter 14, pyrotechnics - particle CC World, <a href="https://http://www.youtube.com/watch?v=EDGZPAKzvdA">https://http://www.youtube.com/watch?v=EDGZPAKzvdA</a>
10 GSLC	LO 1 LO 2	Particles & Emitter - Particle simulation - Shot manipulation with particle	- Particle & Emitter - After Effects CS6 Visual Effects and Compositing Studio Techniques, Chapter 14, pyrotechnics - particle CC World, <a href="https://http://www.youtube.com/watch?v=EDGZPAKzvdA">https://http://www.youtube.com/watch?v=EDGZPAKzvdA</a>
11 F2F	LO 1 LO 2	3D Matte Painting & Set Extension - Set extension - Software integration	- 3D Matte Painting & Set Extension - After Effects CS6 Visual Effects and Compositing Studio Techniques, Chapter 13 Climate and the Environment - Matte Painting, <a href="https://http://www.youtube.com/watch?v=6tbu3iUtXtQ">https://http://www.youtube.com/watch?v=6tbu3iUtXtQ</a>
12 F2F	LO 1 LO 2	3D Matte Painting & Set Extension - Set extension - Software integration	- 3D Matte Painting & Set Extension - After Effects CS6 Visual Effects and Compositing Studio Techniques, Chapter 13 Climate and the Environment - Matte Painting, <a href="https://http://www.youtube.com/watch?v=6tbu3iUtXtQ">https://http://www.youtube.com/watch?v=6tbu3iUtXtQ</a>

13 F2F	LO 3 LO 4	MultiPass Rendering & 3D Layering - Channel - Composing Channel layers	<ul style="list-style-type: none"> <li>- MultiPass Rendering &amp; 3D Layering</li> <li>- After Effects CS6 Visual Effects and Compositing Studio Techniques, Section 3 Creative Explorations, Multipass 3D compositing</li> <li>- Depth Compositing, <a href="http://www.videocopilot.net/tutorials/depth_compositing/">http://www.videocopilot.net/tutorials/depth_compositing/</a></li> </ul>
14 F2F	LO 3 LO 4	MultiPass Rendering & 3D Layering - Channel - Composing Channel layers	<ul style="list-style-type: none"> <li>- MultiPass Rendering &amp; 3D Layering</li> <li>- After Effects CS6 Visual Effects and Compositing Studio Techniques, Section 3 Creative Explorations, Multipass 3D compositing</li> <li>- Depth Compositing, <a href="http://www.videocopilot.net/tutorials/depth_compositing/">http://www.videocopilot.net/tutorials/depth_compositing/</a></li> </ul>
15 GSLC	LO 3 LO 4	Dynamic Simulations - MassFX - Rigid Body Simulation	<ul style="list-style-type: none"> <li>- Dynamic Simulations</li> <li>- 3DS Max 2011 Bible., Chapter 43, Page 1045-1061</li> <li>- 3dsmax Reactor, <a href="http://docs.autodesk.com/3DSMAX/13/ENU/Autodesk%20ds%20Max%202011%20Help/index.html?url=../files/WSf742dab041063133364ce93112a1ceaa7a-8000.htm,topicNumber=d0e218318">http://docs.autodesk.com/3DSMAX/13/ENU/Autodesk%20ds%20Max%202011%20Help/index.html?url=../files/WSf742dab041063133364ce93112a1ceaa7a-8000.htm,topicNumber=d0e218318</a></li> </ul>
16 F2F	LO 3 LO 4	Cloth Simulation - Cloth Modifier - Cloth Simulation	<ul style="list-style-type: none"> <li>- Cloth Simulation</li> <li>- 3DS Max 2011 Bible., Chapter 29, Page 753-756</li> <li>- Cloth Modifier, <a href="http://docs.autodesk.com/3DSMAX/13/ENU/Autodesk%20ds%20Max%202011%20Help/index.html?url=../files/WSf742dab04106313366400bf6112a1cea097-7fac.htm,topicNumber=d0e58889">http://docs.autodesk.com/3DSMAX/13/ENU/Autodesk%20ds%20Max%202011%20Help/index.html?url=../files/WSf742dab04106313366400bf6112a1cea097-7fac.htm,topicNumber=d0e58889</a></li> </ul>
17 F2F	LO 3 LO 4	Fluid FX - Fire Effect Simulation - Smoke Effect Simulation	<ul style="list-style-type: none"> <li>- Fume FX Basics</li> <li>- The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures 2nd Edition, Chapter 7, Page 637-638</li> <li>- FumeFX video tutorials, <a href="http://www.digitaltutors.com/software/FumeFX-tutorials">http://www.digitaltutors.com/software/FumeFX-tutorials</a></li> </ul>

18 F2F		Demolition & Pyro FX <ul style="list-style-type: none"> <li>- Particle Effect Integration</li> <li>- Fragmentation</li> <li>- Physx Simulation</li> </ul>	<ul style="list-style-type: none"> <li>- Rayfire Basics</li> <li>- The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures 2nd Edition, Chapter 7 Page 639-640</li> <li>- Rayfire video tutorials, <a href="http://rayfirestudios.com/help/video-tutorials">http://rayfirestudios.com/help/video-tutorials</a></li> </ul>
19 F2F		Liquid FX <ul style="list-style-type: none"> <li>- RealWave</li> <li>- Hybrido</li> </ul>	<ul style="list-style-type: none"> <li>- Realflow</li> <li>- The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures 2nd Edition, Chapter 7, Page 642</li> <li>- Realflow video tutorials, <a href="http://thevault.realflow.com/first10steps.php">http://thevault.realflow.com/first10steps.php</a></li> </ul>
20 F2F	LO 1 LO 3 LO 4	Performing color correction & Grading <ul style="list-style-type: none"> <li>- Color Correction, control hi-light, mid-tone &amp; shadow</li> <li>- grading color to create mood color</li> </ul>	<ul style="list-style-type: none"> <li>- Performing color correction &amp; Grading</li> <li>- After Effects CS6 Visual Effects and Compositing Studio Techniques, Chapter 5, pages 131</li> <li>- Advance sky replacement, <a href="http://www.videocopilot.net/tutorials/advanced_sky_replacement/">http://www.videocopilot.net/tutorials/advanced_sky_replacement/</a></li> </ul>

## 8. Evaluation

## Theory

Assessment Activity	Weight	Learning Outcomes			
		1	2	3	4
Assignment	50%	√	√	√	√
Mid Exam	20%	√	√		
Final Exam	30%		√	√	√

## 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 explain kinds of Visual Effects problems	Explain which techniques for which problems by using many sources or references, in order to make a conclusion.	Explain which techniques for which problems by using a source or reference, in order to make a conclusion.	Explain which techniques for which problems by using only what did they get in class, in order to make a conclusion.	Explain visual effect certain concept is not clearly and not complete
	1.2. Ability to explain kinds of Visual Effects technique	Explain which techniques for which problems by using many sources or references, in order to make a conclusion.	Explain which techniques for which problems by using a source or reference, in order to make a conclusion.	Explain which techniques for which problems by using source or reference by using only what did they get in class, in order to make a conclusion.	Explain the visual effect technique is not complete
LO 2	2.1. Ability to define camera work setup for visual effects production	Define all camera setup & work for visual effects production	Define one camera setup & work for visual effects production	Define camera setup & work for visual effects production by using only what did get in the class	Define camera setup & work for visual effects is not clearly and not complete
	2.2. Ability to define greenscreen setup for visual effects production	Students can define all greenscreen setup for visual effects production	Students can define one greenscreen setup for visual effects production	Students can define greenscreen setup by using what did they get in class for visual effects production	Defines a green screen setup is incomplete
LO 3	3.1. ability to analyze the concept of integration 3D software and compositing software for certain VFX Concept	Analyze the concept of integration 3D software and compositing software for certain VFX	Analyze the concept of integration 3D software and compositing software for certain VFX	Analyze the concept of integration 3D software and compositing software for certain VFX	Analyzing the concept of integration of 3D software and software for VFX compositing

LO 4		Concept by using many references and sources	Concept by using one reference and source	Concept by using example what did they get in class	certain Concept with the lack of references and sources
	3.2. Ability to analyze the implementation of integration 3D software and compositing software for certain VFX Concept	Analyze the implementation of integration 3D software and compositing software for certain VFX Concept by using many references and sources	Analyze the implementation of integration 3D software and compositing software for certain VFX Concept by using one resource and reference	Analyze the implementation of integration 3D software and compositing software for certain VFX Concept by using reference and source what did they get in class	The implementation of integration 3D software and compositing software for certain VFX Concept are poorly presented with characteristics analyse.
	4.1. Ability to analyze 3D motion artwork	Analyze 3D motion artwork using many references and sources	Analyze 3D motion artwork using one reference and source	Analyze 3D motion artwork using reference and source that did they get in class	Analyze 3D motion artwork is not accurately
	4.2. Ability to analyze 3D motion artwork or animation combine with visual effects shot.	Analyze 3D motion artwork or animation combine with visual effects shot using many references and sources	Analyze 3D motion artwork or animation combine with visual effects shot using one reference and source	Analyze 3D motion artwork or animation combine with visual effects shot using reference and source that did they get in class	Analyze 3D motion artwork or animation combine with visual effects shot with the lack of references and sources



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