# Professional Training course Visual Effects 2020

at The Animation Workshop, VIA University College

# **Program:**

Week 1	17 to 21 August	VFX Pipeline & Fundamentals
Week 2	24 to 28 August	VFX Pipeline & Fundamentals
Week 3	31 Aug. to 4 September	VFX Pipeline & Fundamentals
Week 4	7 to 11 September	VFX Pipeline & Fundamentals
Week 5	14 to 18 September	Tracking
Week 6	21 to 25 September	Compositing 1
Week 7	28 Sept. to 2 October	Asset Building
Week 8	5 to 9 October	Asset Building & UV'ing
Week 9	12 to 16 October	Autumn holiday
Week 10	19 to 23 October	Texturing
Week 11	26 to 30 October	Texturing
Week 12	2 to 6 November	Scene Assembly & Shading
Week 13	9 to 13 November	Lighting
Week 14	16 to 20 November	Digital Matte Painting
Week 15	23 to 27 November	Compositing 2
Week 16	30 Nov. to 4 December	Compositing 3
Week 17	7 to 11 December	Presentation & Breakdowns







# VFX 2020 Detailed program

# **Summary**

Through the VFX course, participants get an understanding of the whole VFX pipeline and gain the right knowledge, skills, and confidence as VFX generalists. The VFX course equips creative CG professionals with the knowledge and skills to create photorealistic computer graphics and integrate them seamlessly with live action footage. This ranges from set extensions to vehicles, other assets, as well as matte paintings and projections. Participants will work with the industry standards for software while they create 3D assets, process the assets through a VFX pipeline and integrate them into a live action environment. Throughout the course, the participants' work on their own unique final project, a short live action scene with integrated CG elements. At the end, participants are guided in creating their breakdowns and presentations and will receive showreel advice, and they will then be prepared to start to work immediately as junior VFX generalists for film or animation studios.

# **Modules**

(Teacher film credits not exhaustive)

# **VFX pipeline & Fundamentals 1 - 4** (4 weeks)

Overall goals: For the participants to be familiar with and understand the VFX pipeline. To get familiar with the industry-standard software needed to create visual effects, and as a result, to create the final project (a short live action shot with integrated CG elements). To learn the terminology and establish a common language. Through extensive hands-on work, the objective is also to bring modelling skills up to speed, to strengthen UV'ing and texturing skills, to go through the lighting, shading process as well as the rendering and compositing stages on a cursory level. Finally, participants will select a live action plate, and in the shot planning phase define the 3 stages of the final project (depicting the 1st, 2nd & 3rd priority elements to add to the scene), which they will work on from week 5 of the course.

#### **VFX pipeline & Fundamentals 1** (1 week)

Teachers: Carlos Tacón, ES. Visual Effects artist at Ghost VFX. Alumnus from the VFX course 2018. *Star Trek: Picard* (2020), *The Mandalorian* (2019).

Magnus Leopard, EE. Visual Effects artist at Ghost VFX. Alumnus from the VFX course 2018. *Star Wars: Episode IX – The Rise of Skywalker* (2019), *The Mandalorian* (2019), *Star Trek: Picard* (2020), *Ragnarok* (2020),

Focus: Course objectives, intro to the 3 stages of the final project, hard-surface modeling and UV'ing approaches.







# **VFX pipeline & Fundamentals 2** (1 week)

Expected teacher: Peter Anlauf, DE. Freelance Digital Compositor at RISE | Visual Effects Studios. Alumnus from the VFX course 2016. *Mack the Knife* (2018), *Deutschland 86* (2018), *Babylon Berlin* (2017), *Rewind: Die Zweite Chance* (2017). Focus: Texturing with Mari

#### VFX pipeline & Fundamentals 3 & 4 (2 weeks)

Teacher: Giancarlo Gallinoro, IT. – Freelance Digital Matte Painter and 3D Generalist at Axis VFX, alumnus from the VFX course 2015. *The King's Man* (2020), *Luther* (2019), *Guardians of the Galaxy Vol.2* (2017), *Thor: Ragnarok* (2017), *Cairo Confidential* (2017).

Focus: Shading and lighting (week 3), digital matte painting and compositing, concepting: Defining the 3 stages of the final project (week 4)

#### Tracking (1 week)

Teacher: Giancarlo Gallinoro, IT. – Freelance Digital Matte Painter and 3D Generalist at Axis VFX, alumnus from the VFX course 2015. *The King's Man* (2020), *Luther* (2019), *Guardians of the Galaxy Vol.2* (2017), *Thor: Ragnarok* (2017), *Cairo Confidential* (2017).

The goal of the Tracking module is for participants to be familiar with the concept of tracking, the software needed, and to have tracked the plate for their own final project, so it is ready for integrating CG elements. Content includes different kinds of tracking, an intro to the 3DEqualizer software, demos and exercise, as well as tracking of the participants' chosen plate with the instructor there to provide assistance and feedback.

#### **Compositing 1** (1 week)

Expected teacher: Hugo Guerra, PT. Director & VFX Supervisor. Walking Dead: March to War (2017), Watch Dogs 2 (2016), Call of Duty: Ghosts (2013).

Focus is on integrating CG assets into live action. The goal is for the participants to be introduced to the basic compositing concepts, and to get a clear idea of the different render passes needed in the compositing stage later in the course. Participants will receive teaching in areas such as AOV assembly, working with over-scan and lens distortion, CG integration into live action footage etc.







# **Asset Building** (2 weeks)

Expected teacher: Andrew Hodgson, AUS – Senior hard surface modeler at DNEG. *Dune* (2020), *Star Wars: Episode IX – The Rise of Skywalker* (2019), *Terminator: Dark Fate* (2019), *Solo: A Star Wars Story* (2018), *Avengers: Infinity War* (2018).

With the two weeks, the goal is to enhance further the participants' modeling skills in Maya and to complete the assets that need to go into the final project. During the 2-week module, participants will learn about the general role of the modeler in the industry, and how he/she fits into the pipeline, how to line up scans, how to deal with scale, time management, naming conventions, organization of the model, UV'ing approaches etc. There will be amble time for project work and feedback.

#### **Autumn holiday** (1 week)

From 12<sup>th</sup> to 16<sup>th</sup> October.

No training activities are planned. However, participants have full access to classroom facilities.

#### **Texturing** (2 weeks)

Expected teacher: Gianpietro Fabre – Texture artist at Framestore, London. *Avengers: Endgame* (2019), *Alita: Battle Angel* (2019), *Wonder Woman* (2017), *Guardians of the Galaxy* (2014)

The goal is for participants to be familiar with a pbr/metalness texturing workflow for Arnold. The participants will have an intro in Mari to get the basics down, and they will be introduced to Substance Painter as well as a possible add-on to Mari. At the end of the module, the participants' assets should be textured and ready for shading.

#### Scene Assembly & Shading (1 week)

Expected teacher: Brian Chinnery, IT. 3D Generalist / Lighting Artist at ScanlineVFX, Montreal. *X-Men: Dark Phoenix* (2019), *Midway* (2019), *Alien: Covenant* (2017), *Murder on the Orient Express* (2017).

The goal is to learn the shading fundamentals and look development workflow, using the Arnold renderer in Maya. Participants will dive into topics such as neutral lookdev, the workflow of Assetization, Arnold standins and references, exploring different types of noise, Metals, advanced layering, plant shaders, skin shading etc. while working on the look of the CG elements for the final project.







# **Lighting** (1 week)

Brian Chinnery, IT. 3D Generalist / Lighting Artist at ScanlineVFX, Montreal. *X-Men: Dark Phoenix* (2019), *Midway* (2019), *Alien: Covenant* (2017), *Murder on the Orient Express* (2017).

The goal is to explore the different lighting scenarios, tonemapping, setting up overscan on a camera etc., and how to generally set up render layers. Participants will work on lighting their scenes in combination with exercises.

#### **Digital Matte Painting** (1 week)

Expected teacher: Stoimen Dimitrov, BG. Digital Matte Painter at Framestore, Montreal. *The Aeronauts* (2019), *Shazam!* (2019), *The Nutcracker and the Four Realms* (2018), *Justice League* (2017).

The goal is for participants is to be introduced to what you can achieve with matte painting, and to show the broad spectrum - which is certainly not limited to backgrounds. The objective is to have participants add a Nuke projection to their final project.

#### Compositing 2 (1 week)

Expected teacher: Michael Hansen, DK. Compositor, CEO at Paracosmic Studios, Denmark.

The goal with this second week of compositing is for participants to start combining their render layers and assembling the image, color grading etc. The module includes a recap about the basic concepts of compositing, and then continues with supervised project work.

#### Compositing 3 (1 week)

Expected teacher: Josh Parks, UK. Senior VFX Compositor at Important Looking Pirates / Writer at 3DWorld / Nuke Trainer. *Mission Impossible – Fallout* (2018), *Ready Player One* (2018), *Jurassic World: Fallen Kingdom* (2018), *Transformers - the Last Knight* (2017).

The goal with this module is to continue compositing the render layers with the assistance of the teacher. At the end of the week, participant projects should be almost finished, so participants can focus on presentation and creating the breakdowns in the following week.







#### **Presentation & Breakdowns** (1 week)

Expected teacher: Leigh Russell, UK. CG Consultant at The Animation Workshop, VIA UC. Leigh Russell has been making digital images for over 25 years. He has been working on projects such as *Star Wars, Interstellar, Hunger Games* and *Harry Potter*.

The goal is for the participants to have a finished live action shot with seamlessly integrated CG elements, and to have assembled a breakdown of the process with press kit images. The final film will have the format: End result - breakdown - end result. The press kit material includes before and after images (plate and key image), title of project, as well as breakdown images. The module and VFX course as a whole ends with a presentation of the final projects, where each participant is expected to give a short presentation of his/her background and some of the ideas going into the final project.

# Format of teaching

We do not have any teachers on staff at The Animation Workshop, VIA University College. Instead, we bring in professional artists from studios to teach for a limited number of weeks. In general, the teacher will do lectures/demos in the mornings followed by exercises and project work in the afternoons. Hands-on sessions are accompanied by 1-on-1 feedback or dailies and weeklies with the whole group. The classroom is set up with a computer for each of the participants, and a teacher computer hooked up to a projector, making it easy to switch between demos/lectures and hands-on work.

#### **Course instructional method**

- Lectures, demonstrations, walk-throughs, hands-on work, workflow talks, exercises, with critique and advice.
- Dailies, weeklies and assignment presentations.
- All modules will include lectures and extensive hands-on experience. The specific exercises listed above are examples and are subject to change.

#### Class hours

Normal class hours are 9:00 to 16:30, but evening/weekend homework must be expected.

#### Software

The VFX course software packages may vary from course to course, depending on the industry and the specific problems that students need to solve in their projects. In general, participants work in Maya, Nuke, Arnold, Mari, Photoshop, 3D Equalizer, Substance Painter, and Substance Designer (again, specific software packages are subject to change).













