

CATALOG ADDENDUM
Effective August 4, 2019

ONLINE DEGREE PROGRAMS

**CHARACTER ANIMATION
BACHELOR OF SCIENCE IN ANIMATION**

Chronological Course Order by Month

Month	Course Code/Title	Credits
1	DGL 101 Digital Literacy	3
2	SBS 113 Behavioral Science	3
3	CAN 101 Overview of Animation Production	3
4	CAN 110 Digital Painting 1	3
5	CAN 115 Shading and Lighting 1	3
6	CAN 120 Shading and Lighting 2	3
7	HUM 240 Contemporary Art	3
8	CAN 125 Modeling Fundamentals	3
9	AVE 100 Figure Drawing for Entertainment Design	3
10	AVE 190 Digital Sculpting 1	3
11	CAN 210 Digital Painting 2	3
12	ENG 101 Creative Writing	3
13	AVE 130 Storyboarding and Storytelling	3
14	CAN 220 Animation and Rigging Fundamentals	3
15	AVE 240 Character Animation 1	3
16	AVE 260 Character Animation 2	3
	HUM 223 Cultural Studies	3
17	AVE 230 Character Rigging 1	3
18	AVE 290 Visual Effects 1	3
19	CAN 250 Portfolio Development	3
20	SPC 214 Creative Presentation	3
	CAN 330 Character Rigging 2	3
21	CAN 340 Character Visual Effects	3
22	MAT 121 College Mathematics	3
23	CAN 350 Scripting Tools and GUI	3
24	SBS 305 Leadership and Organizational Behavior	3
	CAN 365 Acting for Animators	3
25	CAN 375 Animation for Games 1	3
26	CAN 376 Animation for Games 2	3
27	CAN 405 Story Driven Animation 1	3
28	CAN 425 Animating for Dialogue	3
29	HUM 430 Innovative and Immersive Art	3
30	CAN 406 Story Driven Animation 2	3
31	CAN 445 Crowd Animation	3
	ENG 326 Professional Writing	3
32	CAN 480 Portfolio Preparation	3
33	CAN 481 Portfolio Content Creation 1	3
34	CAN 482 Portfolio Content Creation 2	3
35	CAN 483 Portfolio Content Creation 3	3
36	CAN 490 Professional Branding	3

CORE COURSE DESCRIPTIONS

AVE 100 Figure Drawing for Entertainment Design (3 credits)

This course will familiarize students with human and animal anatomy. Students will learn to draw human and animal forms in a variety of poses using a 2D painting package. Students will learn about the importance of proportion in human and animal anatomy, as well as the importance of using construction shapes to represent primary and minor anatomical forms accurately. Students will be able to expand upon their knowledge of anatomy and apply it to three-dimensional character models and animation in courses that follow.

AVE 130 Storyboarding and Storytelling (3 credits)

This course will illustrate how to take a written story and bring it into the digital medium. Students will learn to translate their stories into a script format. Students will take their completed story and turn it into a 2D storyboard to learn visual timing. The knowledge gained will extend students' understanding of the role of preproduction in a production pipeline.

AVE 190 Digital Sculpting 1 (3 credits)

This course will demonstrate to students how to digitally sculpt in an advanced modeling package. Students will learn to digitally recreate traditional sculpting techniques from clay modeling and apply those techniques to their digital models. This level of understanding will push the aesthetic quality of their artwork and apply it to a production pipeline.

AVE 230 Character Rigging 1 (3 credits)

This course will familiarize students with core rigging techniques. Students will develop a keen understanding of how a joint hierarchy works, math-based connections, and how to create a 3D puppet rig that relates to human and animal anatomy.

AVE 240 Character Animation 1 (3 credits)

This course will demonstrate the basics of body mechanics and how they apply to the 12 principles of animation. Students will explore methods for creating movements based on professional references. This knowledge of body mechanics will give students a stronger sense of anatomy and how the human body moves. The techniques used to create a correctly deforming rig will build on information provided in prior courses.

AVE 260 Character Animation 2 (3 credits)

This course will illustrate how to use the 12 principles of animation to create realistic or cartoony movements. Students will learn to create an emotionally driven animation based on their references. Students will integrate their animations into a production pipeline. The techniques used to create a correctly deforming rig will build on information provided in prior courses.

AVE 290 Visual Effects 1 (3 credits)

This course introduces the student to the process of utilizing dynamics systems. Throughout the class, students will learn about the core dynamic capabilities inside of a 3D system that will allow them to recreate various real-world phenomena. By observing the real-world behavior of natural phenomena such as sparks, smoke, and fire, students will learn how to study and evaluate the multiple aspects of a truly dynamic system, applying that knowledge to create their computer-generated effects. Students will also be introduced to the fundamentals of a dynamic particle, rigid body, and soft body simulations in a 3D system.

AVE 310 Visual Effects 2 (3 credits)

This course will take students' knowledge beyond the Visual Effects 1 course by covering advanced simulation techniques and rendering options inside a 3D system. Newer simulation engines covering fluid and nucleus-based dynamics will be covered in depth and will be utilized to recreate various real-world phenomena realistically. Fluid simulations will be generated, recreating a real-world counterpart based on live action reference, and the intricacies of the interactivity of particle, hair, and cloth in a nucleus-based system will also be covered.

AVE 340 Compositing and Scene Finishing 1 (3 credits)

This course will broaden the base of students' knowledge by offering insight into the process of combining computer-generated imagery with audio and video elements. By learning what happens when rendered imagery is integrated into the post-production process, students will better understand the guidelines of compositing and scene finishing.

AVE 350 Compositing and Scene Finishing 2 (3 credits)

This course expands students' skills in the techniques used to meld live action video and audio content with computer-generated images. Students will learn advanced visual effects techniques used in feature films and television.

AVE 355 Matchmoving and Integration (3 credits)

This course provides an overview of the production process and integration of 3D elements into live back plates. Students will learn the techniques of integrating and tracking 3D animation and special effects into live footage. Students will also learn techniques necessary to resolve difficult composites. Actual composites are used to explore techniques in a matte generation, tracking, color correction and image compositing.

CAN 101 Overview of Animation Production (3 credits)

This course familiarizes students with the production pipeline by deconstructing both a finished film shot and a complete video game level. Students will develop a working knowledge of the animation industry and learn the interfaces for a compositing package and game engine.

CAN 110 Digital Painting 1 (3 credits)

This course introduces students to painting on the computer. Students will learn how to use a 2D painting program and at the same time learn about color theory, space, balance, and composition of their artwork. Students will also become comfortable with setting and tools within the software and learn about the importance of layering and non-destructive workflow. Students will integrate their artwork into a production pipeline.

CAN 115 Shading and Lighting 1 (3 credits)

This course will relate real-world cameras and lighting to how cameras and lights work in a 3D environment, including navigation, essential tools and settings, and an introduction to different menus and GUI items. Students will begin learning a 3D program along with what a production-ready asset looks like for production. Students will integrate their renders back into a production pipeline.

CAN 120 Shading and Lighting 2 (3 credits)

This course will focus on the surface appearance of still life objects. Students will learn to manipulate surface properties of materials and how they react to light. Students will determine an art direction for how the objects will appear in their renders and integrate their artwork back into a production pipeline.

CAN 125 Modeling Fundamentals (3 credits)

This course will teach students the creation and manipulation of polygon surfaces for use in film and games. The class will focus on the design and creation of 3D models, proper edge flow of assets, an understanding of form and edge quality, an appreciation of the importance of scale and proportion and scale, as well as a variety of creation tips and techniques used by industry professionals. Students will gain knowledge on how to integrate their models into a production pipeline.

CAN 210 Digital Painting 2 (3 credits)

This course introduces students to painting directly on a 3D model. Students will learn how to use a 3D painting program to build upon the principles learned in Digital Painting I. Students will create maps from their painted 3D models that will be integrated into a production pipeline. The painted maps created will build on the information presented in Shading and Lighting 2.

CAN 220 Animation and Rigging Fundamentals (3 credits)

This course introduces students to rigging and animating in a 3D environment. Students will learn about the 12 principles of animation and how to create a basic control rig. The knowledge gained will give students a solid foundation that can be built upon in upcoming courses. The techniques used to create a correctly deforming rig will build on information provided in prior courses.

CAN 250 Portfolio Development (3 credits)

This course will be an assessment course to gauge a student's comprehension of the computer animation pipeline. The course will be project driven and prepares students for production deadlines. Students will create portfolio assets focusing on one discipline and a presentation on how to integrate these assets into a production pipeline.

CAN 330 Character Rigging 2 (3 credits)

This course will allow students to explore advanced rigging techniques and enforce the importance of good binding and weighting techniques to deform models organically based on preproduction and accurate anatomical references. Students will create an advanced rig that will feature an advanced facial setup, stretchy system, and high-level math-based connections. Students will integrate their rigs into a production pipeline.

CAN 340 Character Visual Effects (3 credits)

This course will teach the fundamentals of creating, styling, and animating dynamic systems for characters. These systems will include muscle systems, dynamic hair, and cloth simulations. Students will learn how to integrate their assets into a production pipeline.

CAN 350 Scripting Tools and GUI (3 credits)

This course will teach the fundamentals of programming for 3D production. Students will learn logic functions, how to create character rig controls, automate production processes, and create graphical user interfaces.

CAN 335 Digital Sculpting 2 (3 credits)

This course will demonstrate how to create high fidelity character meshes in an advance modeling package that can be used in both games and film. Students will focus on sculpting and surface flow human and animal anatomy and apply it to their digital models. This course will increase students understanding of anatomy and help them grow as an artist.

CAN 360 Character Design (3 credits)

This course will demonstrate how to create an appealing character design that works for either film or games. Students will learn how to design appealing characters and create the appropriate character preproduction that can be used in production. Students will learn about how proportions, character silhouette, and form language are essential to visual storytelling in character design.

CAN 365 Acting for Animators (3 credits)

This course students will experiment with traditional acting. By analyzing gathered reference and their own filmed reference, students will be able to determine how to create strong poses, what timing is necessary for the actions in a scene, and how to ensure the actions chosen fit the story they are attempting to tell. This course will help students become more comfortable with their acting abilities and understand body mechanics on a higher level.

CAN 370 Characters for Games (3 credits)

This course expands on sculpting techniques to complete a full game character. Students will create production-ready characters that include cloth, gear, and other elements that make game characters unique. Students will focus on realism while adhering to game engine constraints by building correct topology and materials.

CAN 375 Animation for Games 1 (3 credits)

This course will teach the fundamentals of creating animation cycles for a game character and an environment prop. Students will create a set of animation cycles for characters based off production quality preproduction. The techniques used to create the cycle animations in the class will build on information provided in Storyboarding and Storytelling, Animation and Rigging Fundamentals, Character Animation 1 and 2, and Acting for Animators.

CAN 376 Animation for Games 2 (3 credits)

This course students will learn to utilize their animation cycles from Animation for Games I and integrate their animations into a game engine. Students will experiment with mapping their animations to triggers and layers, so they see their characters move around in a real-time environment. The techniques used to create the cycle animations in the class will build on information provided in Storyboarding and Storytelling, Animation and Rigging Fundamentals, Character Animation 1 and 2, Acting for Animators, and Animation for Games 1.

CAN 380 Characters for Film (3 credits)

In this course students will learn to create characters that work with the modeling, rigging, fur, materials and character simulation based off a production shot. Students will be working closely with an art director to ensure the character can be successful in production shot work.

CAN 400 Environment Design (3 credits)

This course will demonstrate how environments are designed for film or games. Students will learn how to design environments that flow cleanly with the story arc for both film and games. Students will create the appropriate environment preproduction that can be used in production.

CAN 405 Story Driven Animation 1 (3 credits)

This course will illustrate how to interpret storyboards and apply the characters story arc to motions that are appropriate for that scene. Students will create animations using a production pipeline workflow that is appealing and that emotionally driven. They will take into account camera information such as framing and movement and will animate to a camera. The techniques used to create the cycle animations in the class will build on information provided in Storyboarding and Storytelling, Animation and Rigging Fundamentals, Character Animation 1 and 2, and Acting for Animators.

CAN 406 Story Driven Animation 2 (3 credits)

This course building upon the teaching of Story Driven Animation 1 students will learn about working with iterations and animation shot requirements. Students will keep developing their skill set in creating an appealing and that emotionally driven using a production pipeline workflow.

CAN 410 Environment Design for Film (3 credits)

This course trains students on building assets for film sets defined in the preproduction. The course focuses on creating high resolution modular materials and meshes. Students will create assets that can be assembled in a layout scene for production use.

CAN 425 Animating for Dialogue (3 credits)

This course will expand further on the topics covered in the Acting for Animators course. Students will analyze and recreate facial expression based on a deeper understanding of musculature, the subtle transitions in facial structures and the emotions they display. This knowledge will be then used to accurately animate dialogue in an aesthetically pleasing and accurate manner that captures the more difficult aspects of human expression.

CAN 440 Environment Design for Games (3 credits)

This course trains students in the techniques involved in modern game-environment creation. Students will gain a more in-depth technical understanding and will develop assets for use in a game engine. The course focuses on the materials and meshes that adhere to industry standards, both visually and technically.

CAN 445 Crowd Animation (3 credits)

This course will teach the fundamentals of animating background characters ranging from characters drinking coffee to large-scale battle scenes. Students will create crowd simulation, AI, and behavioral animation based on preproduction.

CAN 480 Portfolio Preparation (3 credits)

This course develops students' ability to plan, coordinate, and study assets, using traditional methods to demonstrate their acquired knowledge as a 3D artist. Working from photograph and video reference, students explore and develop characters, environments, vehicles, rigs, and animation ideas. Successful completion of this course arms students with the knowledge of how to use good reference and artistic studies to create production blueprints.

CAN 481 Portfolio Content Creation 1 (3 credits) (3 credits)

This course is designed to allow students to review and continue advancing their overall knowledge of computer animation workflow, timeline, professional behavior, and mindset. This course prepares students to experience a four-week production deadline and introduces students to the challenges of working under production constraints. All assets are managed and critiqued by an art director to help guide projects towards photorealistic expectations under defined deadlines.

CAN 482 Portfolio Content Creation 2 (3 credits)

This course continues the development of asset completion to a deadline. Students will incorporate knowledge developed from prior courses to improve their artistic sensibilities, workflow, skill sets, technical knowledge, and personal time management. Students will continue working with the art directors and within the critique process as they work to create photorealistic content. In this course, students work at optimal speed and precision, having a keen understanding of artistic appeal, time management, asset creation, and professional behavior – preparing them for the methods, environments, and conditions experienced in the production arena.

CAN 483 Portfolio Content Creation 3 (3 credits)

This course provides students with the time to develop a demo reel commonly expected during interviews. During this time, students take the content developed throughout their degree program and assemble it into a presentable package. Before the creation of the demo reel, a student's content is reviewed to help the student determine the best material for showcasing their talents as a computer animation artist.

CAN 490 Professional Branding (3 credits)

This course will help students cultivate their portfolios, business cards, resume and their social media presence. This course is designed to prepare students for their career and how to present themselves professionally. Students will also be familiarized with freelance contracts and non-disclosure agreements.

CGA 360 Visual Effects for Games 1 (3 credits)

This course will illustrate what current games are using to create in-game visual effects. Students will build on the knowledge from the prior Visual Effects courses and start to relate that knowledge and create effects for a real-time environment. Students will create and design real-time particle effects for both static and animating 2D/3D elements.

CGA 370 Visual Effects for Games 2 (3 credits)

In this course students will learn to utilize their effects cycles from Visual Effects for Games 1 and integrate their effects into a game engine. Students will map their effects to triggers, so they see their effects in a real-time environment, along with learning about real-time shaders and how to light their effects.

CGA 380 Visual Effects for Film 1 (3 credits)

In this course students will learn to design and create visual effects animation, procedural simulation, dynamic simulation, particle and fluid systems by preproduction and art director feedback. Students will also learn to shade and light and their effects and integrate their work back into a production pipeline.

CGA 400 Visual Effects for Film 2 (3 credits)

In this course students will learn to enhance the visual storytelling through the collaboration between Director and the Cinematographer's preparation and execution of the imagery that is passed on to visual effects to complete the scene. Students will learn green screen methodology and study the art and craft of compositing, how to execute motion tracking to integrate the effects with the live action shot adequately. Students will understand what must be pre-visualized to communicate an idea or concept to all members of the visual team in order to plan shots effectively.

ACADEMIC POLICIES

TRANSFER CREDIT

Students who would like to request an evaluation of prior credit for potential transfer must submit a written request and provide official transcripts from the institution or entity awarding the credit within 30 days after their program start date.

Non-U.S. Institutions

Students with degrees from non-U.S. colleges and universities must submit official translation and an evaluation prepared by a National Association of Credential Evaluation Services (NACES) or Association of International Credential Evaluators (AICE)-member organization.

Course Descriptions

Students may be required to provide copies of course descriptions from the academic catalog or course syllabus published by the institution awarding the credit.

Grades of Transfer Credits

Only courses with an earned grade of "C" (2.0 on a 4.0 scale) or higher will be considered for transfer credit.

Level of Transfer Credits

Only college-level credits (100 level course or equivalent and above) taken at an accredited institution of higher education will be considered for transfer. No remedial or developmental courses will be considered for transfer.

Prior Experiential Learning

The school does not grant credit for prior experiential learning.

Proficiency Credit from External Sources

Official documents related to CLEP or AP scores or similar means to demonstrate proficiency for credit must be received by the school prior to the class start. No more than 25 percent of a program's required credits will be considered for any type of proficiency credit.

- **Advanced Placement.** Some foundation courses can be obtained through College Board's AP Studio examinations. Students who take the College Board Advanced Placement (AP) or International Baccalaureate (IB) courses and score three or higher on the AP exam or four or higher on the IB exam for those courses while in secondary school may receive proficiency credit. This score applies to all subjects. All materials must be received from the Scholastic College Board organization and evaluated prior to the start of the program of enrollment.
- **College Level Examination Program (CLEP).** Complete the College Level Examination Program (CLEP) and earn a score of 50 or higher on computer-based CLEP examinations equivalent to college courses prior to the start of the program of enrollment.
- **Military Experience Credits.** Complete training, employment, or other educational experience in the military as measured through DANTES, DSST examinations, or as shown on an American Council on Education (ACE) transcript. The school recognizes and uses the ACE Guide to the Evaluation of Educational Experience in the Armed Services to determine the value of learning acquired in military service. We award credit for appropriate learning acquired in military service at levels consistent with ACE Guide recommendations when applicable to a Service member's program. In addition, we utilize Joint Services Transcript in our processing of prior learning experiences for possible transfer credit.

Total Allowable Transfer of Credit

Students must earn a minimum of 25 percent of the total program credits required for graduation in residency at The Los Angeles Film School and may only be granted a maximum of 75 percent of the total program credits required for graduation through transfer credit earned at an outside institution and/or proficiency testing.