

	Q1	Q2	Q3	Q4
<b>Employability Skills</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Demonstrates Employability Skills necessary for successful entry into a career or college. This includes Soft Skills, Customer Service, Academic, Problem-Solving, and Certifications.				
Manage stress and control emotions.				
Adapt effectively to changes in projects and work activities.				
Use oral and written communication skills in creating, expressing and interpreting information and ideas.				
Active listener; sensitive to needs of client and/or target audience.				
Communicate effectively when developing positive customer/client relationships.				
Demonstrate knowledge of leadership skills needed in the IT environment.				
Build interpersonal skills with individuals and other team members.				
Identify, assess, and demonstrate positive work behaviors and personal qualities.				
Finalize personal career plan to meet career goals and objectives that demonstrates flexibility and willingness to learn new knowledge and skills				
Communicate information and ideas effectively to multiple audiences using a variety of media and formats.				
Develop cultural understanding and global awareness by engaging with learners of different cultures, and/or completing projects that require an understanding of different cultures.				
Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.				

	Q1	Q2	Q3	Q4
Demonstrate personal responsibility for lifelong learning.				
Compile dynamic, grammatically correct, communication skills for digital marketing.				
Apply successful strategies and customer service techniques to build customer relations through digital marketing.				
Develop an identity and appropriate materials to support a digital portfolio, consisting of a resume, digital media assets, and various promotional products.				
Identify and construct appropriate “voice” for professional communications.				
Identify types of electronic marketing and develop a plan to market a digital portfolio.				
<b>Planning</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Identifies, produces and organizes appropriate content to support and manage 3D projects. This includes Audience, Storyboards, Shots, Animatics, Project Requirements, Scope, and Scripts.				
Identify the purpose, audience, and audience needs when preparing projects and assets.				
Plan and manage activities to develop a solution or complete a project.				
Determine scope of interactive media work to achieve individual and group goals.				
Demonstrate knowledge of planning considerations: Target audience, availability of hardware, selection of appropriate software, selection of format, delivery mode, set schedule.				
Assess unique and similar characteristics of models and plan for development.				

	Q1	Q2	Q3	Q4
Produce and/or gather concept art, assets, character sketches, environment sketches, and storyboard/animatic information.				
Identify and define authentic problems and significant questions for investigation.				
Collect and analyze data to identify solutions and/or make informed decisions.				
Use multiple processes and diverse perspectives to explore alternative solutions.				
Study character sketches and storyboards to become familiar with character, required details, and animation outcome; deliver required details to client in appropriate format.				
Assess model requirements for story: complexity details, relationship between models, media format and delivery output.				
Create a storyboard and/or prototypes to develop animations, models, and motion graphics. Determine appropriate use of action and planning of shots in a storyboard.				
Design a concept, a short script, and determine the resources needed to support and improve dramatic entertainment value of animation or motion graphics.				
Assess target audience and identify information needs.				
<b>Managing</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Prioritizes and utilizes resources and techniques to support 3D projects. This includes Gathering assets, time mgmt, naming conventions				
Use time management to produce graphics, animations, models, and/or motion graphics according to production schedule.				
Demonstrate knowledge of project management tasks and responsibilities.				

	Q1	Q2	Q3	Q4
Communicate with others (such as peers and clients) about design plans and progress.				
Gather and analyze interactive media customer requirements.				
Demonstrate effective selection and use of tools for interactive media production, development and project management.				
Conform to appropriate naming scheme/conventions.				
Select and use applications effectively and productively.				
Develop and/or gather scene assets, reference materials, and key poses for animations.				
Prioritize and assess critical elements in designing an animation in the stages of pre-production, production, and postproduction.				
Utilize a digital camera to capture source footage/research data.				
<b>Ethics</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Scrutinizes methods and ethical practices to maintain compliance for legal operations. This includes intellectual property, compliance, licensing, legal issues, copyright, digital citizenship				
Demonstrate knowledge of copyright and intellectual property protection issues.				
Demonstrate knowledge of standard copyright rules for artwork, graphics, and image use.				
Advocate and practice safe, legal, and responsible use of information and technology.				
Consider intellectual property issues, (copyright, trademarks, use, fair use, protection, non-disclosure agreement, etc.) when creating digital products.				

	Q1	Q2	Q3	Q4
<b>Production Standards - Graphic Design</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopts habits to support industry-standard graphic design requirements and solve challenges. These standards can be applied to real-world unpredictable situations and include: Illustrations, 2D Animations, texturing, filters, adjustments, selections, masking, format and delivery output, and preparation and/or finishing of graphics for modeling, animation, and special effects.				
Apply the fundamentals of digital & perspective drawing when developing creative assets.				
Develop surface material textures for 3D models and scenes.				
Employ design, typography, and color principles, while creating visually appealing graphic images and professional layouts.				
Produce, acquire, manipulate, troubleshoot, optimize, publish and export graphics, concept art, character sketches, prototypes, illustrations, and/or animations for a variety of purposes.				
Construct digital assets using various features of a digital drawing tablet.				
Develop, evaluate, and revise graphics designed to increase dramatic or entertainment value of productions.				
Manipulate layering techniques to achieve depth.				
Include appropriate blend modes, alpha channels, filters, and motion blur appropriately to achieve goals.				
Utilize masks and mattes appropriately.				

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
Demonstrate knowledge of graphic resolution, graphic size, vector graphics, and graphic file formats for web, video, and print.				
Demonstrate an understanding of working with brushes, symbols, graphic styles, and patterns.				
Use selections, guides, rulers and masks appropriately.				
Adjust or correct the tonal range, color, or distortions of an image.				
Compose shots using the rule of thirds.				
Originate and/or gather concept art, assets, character sketches, environment sketches, and storyboard/animatic information.				
Apply principles and elements of color design, typography, and interactive marketing techniques.				
Develop prototypes, animatics, 2D animations, and 3D models.				
Manipulate, troubleshoot, compress, publish and export graphics and/or animations.				
Apply color theory to broadcast graphics.				

	Q1	Q2	Q3	Q4
<b>Production Standards--Modeling</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopts habits to support industry-standard modeling requirements and solve 3D Modeling challenges. These standards can be applied to real-world unpredictable situations and include: Model requirements, complexity, media format and delivery output, and preparation of geometry for sculpting.				
Convert real objects to models using Maya 3D software.				
Model complex graphics, using independent judgment, creativity, and computer equipment.				
Construct objects or characters that appear lifelike by manipulating light, color, texture, shadow, and transparency and/or manipulating static images to give the illusion of motion using visual effects through Maya 3D software.				
Show increased reality by using perspective and receding planes.				
Prepare geometry for sculpting.				
Export models in a variety of formats for various delivery options.				
<b>Modeling Techniques</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopts modeling techniques to support industry-standards and solve 3D Modeling challenges. These techniques can be applied to real-world unpredictable situations and include: Create polygon models, subdivision surface models, NURBS models, conversion to/from polygon, subdivision, and NURBS; normals, topology, modifiers				
Create polygon models using various techniques: extrude, bridge, planar, vertex,				

	Q1	Q2	Q3	Q4
Create subdivision surface models: understand polygon proxy modes, set component display				
Convert to and from polygon, subdivision, and NURBS.				
Understand normals and their role.				
Construct NURBS models (project curve on surface, hulls, surface point, surface patch, isoparm manipulation, etc.)				
<b>Modifiers</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Utilizes appropriate modifiers to achieve project goals. This includes: Deformation, Animation, etc.				
Work with modifiers: deformation, (lattice, bulge, twist, noise,) animation, (blendshapes, soft modification/soft selection).				
Animate with deformers: bend, jiggle, lattice, squash, and twist.				



	Q1	Q2	Q3	Q4
<b>Surface Texture Techniques</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Applies surface material and techniques to models. This includes: texturing, UVs--layout, unwrapping, manipulating; create/assign textures to polygons; materials, mental ray				
Manipulate UVs within the UV Texture Editor.				
Use the Planar Map, Cylindrical Map, Automatic Maps, etc., as a method of creating a UV layout.				
Create and assign textures to polygons: Diffuse Map, UV snapshot, texture maps, assign maps to shader.				
Manipulate curves/splines.				
Apply surface materials and/or textures to model.				
Demonstrate understanding of UV's.				
Utilize UV mapping techniques to define and apply textures to models.				
<b>Scene Composition</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Combines resources and techniques to support scenes. This includes: Layout, dressing, lighting, camera angles and techniques, rendering a turntable view, etc.				
Frame the shot to achieve the desired effect.				
Produce and determine appropriate shots to further the narrative flow.				
Include various types of transitions and video and audio effects.				
Select appropriate camera angles and techniques				
Combine intermediate compositing techniques to support a unified digital production.				

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
Design complex graphics and animations, using independent judgment, creativity, and technology				
Employ effective camera techniques for rendering a turntable view.				
Interpret how different light sources affect a scene or object and create effective lighting.				
Utilize depth of field and light to set the mood for the story.				

	Q1	Q2	Q3	Q4
<b>Sculpting</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopt habits and techniques to support industry standards for sculpting. These techniques can be applied to real-world unpredictable situations and include: Symmetry, asymmetry, additive/subtractive sculpting/ creating/using alphas, adding new geometry; brushes; move/reposition mesh; polygon management based on hardware, scene mgmt of multiple pieces of geometry, topology flow and manipulation, exporting				
Integrate objects created in Maya within the ZBrush application for enhancement.				
Model and enhance complex graphics, using independent judgment, creativity, and computer equipment.				
Make objects or characters appear lifelike by manipulating light, color, texture, shadow, and transparency and/or manipulating static images to give the illusion of motion using visual effects through the integration of Maya 3D and ZBrush software.				
Develop intermediate modeling, sculpting, texturing, painting, and digital artistry skills.				
Utilize UV mapping techniques to define and apply textures to models.				
Demonstrate proficiency in working with ZBrush software				
Select color and textures to enhance 3D graphics and/or special effects.				
<b>Evaluation</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Critiques/analyzes completed project to determine if it accomplishes objective.				
Evaluate experiences, providing suggestions and sharing alternative resources discovered.				

	Q1	Q2	Q3	Q4
Test interactive media products.				
Use models and simulations to explore complex systems and issues.				
Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.				
Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.				
Evaluate alternative ways to modify geometry including 3rd party applications.				
Select and use appropriate tools to access, manage, integrate, and create information and develop solutions to problems.				
<b>Rigging</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopts habits and techniques to support industry standards for rigging. These techniques can be applied to real-world unpredictable situations and include: Set-Driven Keys, relationships; constraints; bones/joints; binding; Character, facial, inanimate objects, deformers, expressions, scripting, caching, etc.				
Understand constraints when rigging.				
Rig joints/bones and apply appropriate binding techniques.				
Build control systems.				
Design rigs that can be re-used.				
Utilize expressions, scripting, set-driven keys, and other techniques for rigging and animation.				

	Q1	Q2	Q3	Q4
<b>Camera Orientation</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Analyze and select suitable techniques for camera orientation to fulfill project goals. This includes: Placement, FOV techniques; movements; match-moving, etc.				
Select appropriate camera orientation, lens types, field of views, angles and movements.				
Select appropriate camera movements including dolly, motion paths and tracking, pan,				
Employ match moving and compositing pipeline.				
<b>Animation Techniques</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopt habits and techniques to support industry standards for animation. This includes: Keyframing & manipulation; curve editor & types, paths, non-linear, facial, to sound, expressions/scripts, timeline controls; deformers, blend shapes, frame rate, inanimate objects, layers, characters, body mechanics in relation to characters, etc.				
Perform advanced keyframing functions.				
Construct complex animations, using independent judgment, creativity, and computer equipment.				
Build relationships between objects using set-driven keys.				
Work with the animation curve editor; understand and identify curve and tangent types.				
Animate with expressions; scripts				
Understand and use Blend Shapes				

	Q1	Q2	Q3	Q4
Determine appropriate scripting techniques to automate tasks and add efficiency to workflow.				
Produce an accurate digital representation of motion for film and/or video games.				
Export 3D Animations for a variety of applications				
<b>Motion Capture</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopts industry-recognized habits and techniques to support data acquired through motion capture. These techniques can be applied to real-world unpredictable situations and include: Capturing data, using data, cleaning data, re-targeting data, etc.				
Integrate motion capture technology with 3D Motion Graphics.				
Perform motion capture as needed to support motion graphics.				
Produce and clean motion capture data and employ techniques for advanced animations.				
<b>Animation Fundamentals</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Evaluates and utilizes industry standards for animation. This includes: Principles, cycles, etc.				
Construct animations that incorporate walk cycles, jumps, turnarounds, voice (lip syncing),				
Incorporate the principles of animation: squash/stretch, timing/weight, archs, secondary animation, anticipation, follow thru/overlap.				
Design animations that incorporate various types of linking, motion, rollovers, and interactivity.				
Apply filters and blend effects to video and animations.				

	Q1	Q2	Q3	Q4
Employ animation techniques for cell animation.				
Describe the use of dope or exposure sheets.				
Study the process for lip-syncing the animation to a voice track				
Convert traditional drawing skills to digital illustrations.				
Compare traditional animation to digital animation techniques.				
Create an animatic (pencil test) from the digital storyboard				
Understand keyframe manipulation.				
Transform objects through translation, rotating, and scaling.				
<b>Dynamics &amp; Special FX</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Employs industry-recognized techniques for incorporating dynamics and special effects into projects. These techniques can be applied to real-world unpredictable situations and include: Particles, Rigid bodies, soft bodies, etc.				
Generate advanced techniques for dynamics with Maya 3D Animation software.				
Construct rigid and/or soft-body dynamics appropriately.				
Demonstrate proficiency in applying dynamics and special effects for motion graphics.				
Compile particle dynamics.				
Compile rigid body dynamics.				
Compile soft body dynamics.				

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
Utilize scripting techniques to automate tasks and add efficiency to the workflow				
Develop objects or characters that appear lifelike by manipulating and simulating dynamics through Maya 3D software.				



	Q1	Q2	Q3	Q4
<b>Sound</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopt habits and techniques for blending audio with animations. This includes: Formats, syncing, etc.				
Animate to sound; create voice-overs for characters.				
Identify and construct appropriate “voice” for animations.				
Ensure audio and video are synchronized.				
<b>Production Standards--Motion Graphics</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopt habits to support industry-standards for motion graphics. This includes: Requirements, complexity, media & file formats and delivery output, interlacing, progressive scans, motion graphics--action/title safe, colors, etc.				
Develop video and animation content for delivery on the web, simulations, interactive advertising, motion graphics, and/or mobile devices.				
Incorporate Video Alpha Channels, as needed.				
Perform digital media editing functions including importing and adding clips to the timeline, adding transitions, adding titles, etc., using non-linear video editing software.				
Determine the difference between fields/interlace; progressive scan.				
Create projects that require keying: chroma key, luma key, spill suppression.				
Produce or acquire assets for motion graphics and/or video content.				
Generate projects to various formats for a wide degree of playback compatibility using appropriate software.				

	Q1	Q2	Q3	Q4
Apply color theory to broadcast graphics.				
Demonstrate proficiency in working with the stereoscopic 3D workflow.				
<b>Motion Design Techniques</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adopts motion design techniques to support industry-standards. These techniques can be applied to real-world unpredictable situations and include: Color, typography, layout & animate according to storyboard, layering to achieve depth, blend modes, alpha channels, masks, principles of animation, channels & apps, Z depth, masks & mattes, motion blur, compositing, etc.				
Composite 3D motion graphics into video.				
Utilize puppet tool.				
Perform advanced tracking and stabilization techniques.				
Incorporate advanced editing techniques and superimpose images.				
Understand blend modes, alpha channels, and masks.				
Inspect channels and their applications: alpha, RGB, Z Depth.				
Understand masks and mattes (creation, modification, manipulation) and their applications.				
Incorporate motion blur, when appropriate.				
Composite multi-layer images, (ambient, depth, diffuse, occlusion, reflection, shadow, specular).				
Select from a variety of techniques and tools to achieve advanced motion tracking, stabilization, and rotoscoping				

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
Utilize pre-rendering techniques.				
Utilize motion paths and tracking techniques to enhance animations and motion graphics.				

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Effects</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Utilizes appropriate techniques and effects to support projects according to industry standards. This includes: Color correction, modification effects, keying, etc.				
Demonstrate working knowledge of color correction: Primary – channel miser, hue, saturation, levels; secondary – color balancing, alpha channels, manipulation.				
Blend motion design techniques and appropriate use of effects to enhance productions and animations.				
Perform advanced editing functions for visual effects using After Effects, Motion Builder, and Maya software; keying, color correction, masks, mattes, lighting, special effects.				
Demonstrate ways to communicate effectively and efficiently through the use of special effects.				
<b>Rendering</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Evaluates and selects appropriate rendering techniques to support projects. This includes: Settings, formats, etc.				
Determine appropriate rendered formats.				
Mental Ray: Create an Ambient Occlusion Map, create/apply displacement maps, bake textures.				
Employ techniques for rendering a turntable view.				
Export 3D Animations for a variety of applications.				
Prepare, render, and deliver animations that achieve desired results.				
<b>Advanced employability skills</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

	Q1	Q2	Q3	Q4
Demonstrates Advanced Employability Skills necessary for successful entry into a career or college. This includes: Independent Judgment/Creativity, and Innovation/Troubleshooting/Decision making/participation in forums/lifelong learner, Critical Thinking, Collaboration, etc.				
Combine technical skills, troubleshooting techniques, and creativity to construct a unique graphic that provides a solution for a client.				
Apply existing knowledge to generate new ideas, products, and processes.				
Develop and implement solutions to advanced interactive media projects with limited supervision.				
Troubleshoot technical challenges and participate in user forums.				
Finalize digital portfolio to document knowledge, technical skills, and experience that incorporates creativity, excellence, and is visually appealing.				
Transfer current knowledge to learning of new technologies to solve problems.				
Utilize critical thinking, innovation, and creative problem-solving techniques to identify and solve problems.				
Combine technical skills, troubleshooting techniques, and creativity to construct a unique animation that provides a solution for a client.				
Analyze elements of a problem and develop creative, innovative solutions that utilize critical thinking skills				
<b>Finishing</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

	Q1	Q2	Q3	Q4
Evaluates and selects appropriate finishing techniques to support projects. This includes: Lighting, texturing, shadows, transparency, etc.				
Determine appropriate lighting techniques for the project				
Create objects or characters that appear lifelike by manipulating light, color, texture, shadow, and transparency and/or manipulating static images to give the illusion of motion using visual effects through Maya 3D software.				
Evaluate how different light sources affect a scene or object and create effective lighting.				
Composite multi-layer images, (ambient, depth, diffuse, occlusion, reflection, shadow, specular).				
<b>Collaboration/Teamwork</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Use digital media environments to communicate and work collaboratively to support individual learning and contribute to others.				