Nikki Dunsire

Educator & Production Artist

nikki.a.dunsire@gmail.com | 702.580.6204 | **Faculty Bio** | **Portfolio**

EDUCATION

Master of Science: Computer Graphics & Animation with an emphasis in 3D Technical Direction and Development
DePaul University, Chicago, IL 2004

Bachelor of Science: Media Arts and Animation
The Art Institute of Portland, Portland, OR 2006

Bachelor of Art: Digital Media Studies, Minor in Art & Design
University of Denver, Denver, CO 2002

SKILLS & SOFTWARE

Industries

- Media Arts & Post-production work for Film and Advertising
- Game Production
- Immersive media development (AR, VR, MR)
- Artificial Intelligence - exploring uses within the production pipeline

Production Specialties

- 3D Modeling (High and Low Poly) - Strength in hard surface and environmental asset
- Photogrammetry | Digital Twining - Capturing and asset optimizing for Real-Time rendering environments
- Lighting and Texturing - For static and Real-Time rendering environments
- Advanced Rendering and Compositing (Static) - Including layering systems for quick postprocessing edits - (Maya/3ds Max)
- 3D Asset and Camera Animation
- Rigging
- VR & AR Development
- Motion Graphics
- Production Management and Producing
- Graphic Design - Primarily marketing materials and web design

3D & 3D Support Applications

- Autodesk Maya
- Autodesk 3ds Max
- Blender
- Zbrush
- Reality Capture
- Agisoft Metashape
- Renderman, Vray, Arnold, Mental Ray
- Headus UV Layout
- Quixel Suite
- Adobe Substance Painter & Designer
- Marmoset Toolbag | SketchFab
- Keyshot
- 3D-Coat
- xNormal
- NVidia Magic3D (exploring)

Scripting | Coding

- GitHub
- CopilotX | OpenAI Codex (exploring)
- Maya's MEL (limited)
- Unreal Engine Blueprints
- C# and C++ (limited)

Game Engines

- Unity
- Unreal Engine
- Zapworks Studio

Immersive Tech

- Meta: Quest(s), Rift(s), Go
- HTC Vive
- Hololens, Magic Leap
- Zapbox
- Mobile AR (iOS)

Motion Graphics
- After Effects
- NUKE
- RunwayML (AI)

Design Applications
- Adobe Creative Suite (Photoshop, Illustrator)

Artificial Intelligence
- ChatGPT
- RunwayML
- CopilotX

INVITED TALKS

- Dunsire, N. (2023), Character Design, University of Canterbury, Christchurch, New Zealand.
- Dunsire, N. (2023), Hololens Academic Research Grant, University of Canterbury, Christchurch, New Zealand.
- Dunsire, N. , Heider D. , Ramirez, E. , Bye, K. (2023), Ethics and the Metaverse. 32nd APPE International Conference. Portland, Oregon.
- Dunsire, N. (2021), XR in Marketing. RAINmaker Accelerator Program. Portland, Oregon/Eugene, Oregon.
- Dunsire, N. (2018), Immersive Media Applications. East Metro Community Media. Portland, Oregon.
- Dunsire, N. (2017), The Oculus Rift and VR Development. Betacon. Portland, Oregon.
- Dunsire, N. (2017), Building for the Technology of the Future. Betacon. Portland, Oregon.

GRANTS

- 2017-2018, The Art Institute of Portland, Westgate Resorts VR Training Simulation Grant recipient, $20,000 received for academic years 2017-2018
- 2015-2016, Clackamas Community College & Oregon Storyboard, Microsoft Hololens Academic Research Grant recipient, $100,000 received for academic years 2015-2016.

ACCOLADES

- University of Oregon and World Athletic Championships - Oregon22 Opening Title Sequence Producer, Lead Instructor, Production (Motion Graphics)
  - ❖ KGW8 - University of Oregon Freshman creates intro video for World Athletics Championships in Motion Graphics class
  - ❖ The Oregonian - Oregon Live
  - ❖ The Register-Guard - UO Student creates Oregon22's title sequence to be seen by a billion viewers
  - ❖ The Lake Oswego Review - Lake Oswego High School Alumnus creates video for World Athletic Championship
  - ❖ https://journalism.uoregon.edu/news/oregon22

- Lead Instructor for one of Schools.com Top 10 Game Development Degree Programs (2017-2018)
- Successful completion of the Microsoft Hololens Academy (Fall 2015)
- Production Coordinator and Technical Director for award winning animation and VFX studio - Emmys, Tellys and Rosey awards (2006-2010)

EXPERIENCE

The University of Oregon Fall 2018 – Present

Career Faculty and OR Lab Manager

Programs: Strategic Communication and Multi-Media Journalism within the School of Journalism and Communication

- **Courses teaching**:
  - **Creating in Unity** (J410 | J510): In this course, students get an introduction to the tools used for designing and building for virtual reality (VR) and augmented reality (AR) experiences and more broadly, the Metaverse. They will work with the game engine Unity to design their first interactive VR scene and AR building software to create mobile augmented visuals. Students explore off-the-shelf resources to get them started quickly and gain an understanding of the overall production pipeline for generating content for immersive spaces. This course sets the foundation for future building classes, where students examine the steps needed to create custom objects and environments for their original ideas.
  - **Building for Immersive Media** (J410 | J510): In this course, students get an introduction to the production pipeline for creating custom content for immersive and interactive media. They gain hands-on experience utilizing cross-platform workflows and production software, to bring their original ideas to life. This course focuses on 3D modeling, texturing, and lighting for real-time rendering environments. This is a hands-on course with an emphasis on understanding industry standard technology used to build content for immersive and interactive experiences. By the end of this term, they should be able to: work with and understand 3D production software and their role in the construction of immersive and interactive content, create basic models (High to Low Poly workflow) with proper topology and understanding of optimization and performance pitfalls, design virtual Computer-Generated assets and be able to publish them to AR compatible mobile devices as well as computer driven applications for interactive experiences, have a foundational understanding of the production pipeline used in creating content for interactive applications, understand how modeled and textured assets are integrated into real-time rendering engines, understand and be able to implement functionality through basic scripts.
  - **Production with Unreal Engine** (J410 | J510): In this course students will work with comparable production applications like Unreal Engine, to develop VR scenes used for storytelling and visualization. The technical focuses of the course include setting up VR functionality, basic interactions and triggers, high dynamic lighting and working with material graphs to generate visually compelling environments. Additionally, this course will examine alternative ways to generate models using scanning techniques and incorporating PBR materials using Megascans.
  - **Photogrammetry** (J410 | J510): Photogrammetry is a technique used for creating CG (computer-generated) content through a series of photographs. In this course, students will be introduced to this process and will learn industry standard methods and software for optimizing these assets for use in real-time rendering environments.
  - **Creating for Immersive Platforms** (J699 – Online IMC Program): An introduction to the tools used for designing and building virtual reality (VR) and augmented reality (AR) experiences. Working with the game engine Unity to design interactive VR scenes, AR builder Zapworks to create mobile augmented visuals, and 3D content creation software to learn the foundational skills for building real-time ready assets. Exploring off-the-shelf resources to get students started quickly and gain an understanding of the overall production pipeline for generating content for immersive spaces.

- Introduction to 3D for Film and Adverting (CreateWith3D – J410| J510): This hands-on course gives students a foundational look at how to create 3D content for the purposes of advertising, film, storytelling, and communication using industry standard software and techniques. Students gain experience utilizing cross-platform workflows and production software to bring their concepts to life. This course focuses on the fundamentals of 3D modeling, texturing, lighting, animation and render setup.
- Motion Graphics (J410 | J510): This hands-on course gives students a foundational look at how to create motion graphics for the purposes of advertising, storytelling, and communication using After Effects, and Photoshop. The course focuses on interface exploration, file management and integration, non-destructive techniques, cross-platform workflows, rotoscoping, stabilizing and tracking footage, compositing, effects and animating.
- Digital Portfolio (J410 | J510): In this course, students comprise a final digital portfolio demonstrating their best work. They develop an online presence and gain knowledge that prepares them to enter their industry. Additionally, they create professional documentation that supports their portfolio package and prepares them for job applications. This process includes discussions about best practices while working with clients and writing contracts for freelancing. Emphasis is on professional development.
- Project & Client Management (J624): This course focuses on best practices while working with clients and writing contracts for freelancing. Emphasis on professional development, communication, and project organization.

➢ Oregon Reality Lab Manager Responsibilities and Administrative Tasks:

- Providing expert consultation on technology and equipment purchases, including immersive media investments in the SOJC-Portland Oregon Reality Lab and the SOJC-Eugene Experience Hub.
- Conducting research and development of best practices and equipment to be used as part of the content creation portion of the OR Lab mission.
- Managing software and hardware procurement for the OR Lab, in coordination with IT and the Business Manager.
- Managing software and hardware firmware updates in the OR Lab, in coordination with IT.
- Managing hardware setup and installation in coordination with IT when needed and appropriate.
- Assisting students and faculty with equipment and software to support research and coursework.
- Creating and maintaining use and care documentation for lab hardware.
- Providing technical expertise to faculty and students on projects.
- Training and managing OR Lab Assistants.
- Scheduling and managing open lab hours and assisting in managing lab use, scheduling, and supervision.
- Developing and overseeing the OR Lab's equipment database and checkout system, in coordination with IT and the Business Manager.
- Overseeing and managing the OR Lab's social media footprint and assisting the UO Communication team in advertising OR lab activities when needed.
- Providing expert consultation and assistance in developing plans for a certificate program and/or other community and professional education summer course offerings related to immersive content building.
- Assisting in building collaborative opportunities across campus and in the community.
- Providing support in research grant development.
- Preparing grant applications for immersive storytelling projects.

- Creating initial OR Lab policies and procedure documentation and assisting in revisions and maintenance.
- Services to the college:
  - ❖ Technology committee member

Washington State University Fall 2018 – Spring 2020

Adjunct Faculty

Program: Digital Technology and Culture

- **Courses taught**:
  - **Engines and Platforms** (DTC492): This course focused on game development systems in order to learn intuitive tools and rapid workflows for creating interactive 3D and 2D content, and multi-platform publishing environments. There was additional focus on managing game assets for various platforms. Students learned how to develop content using industry standard software for game and app creation and gained an introductory level understanding of the supporting applications used to build game ready assets.
  - **Special Topics: Game Portfolio** (DTC499): In this course, students comprised a final digital portfolio demonstrating their best work. They developed an online presence and gained knowledge that prepared them to enter the game industry. Additionally, they created professional documentation that supported their portfolio package and prepared them for job applications. This process included discussions about best practices while working with clients and writing contracts for freelancing. Emphasis on professional development.

Pacific Northwest College of Art (PNCA) Winter 2018 – Spring 2019

Faculty – Game Design

Program: Illustration

- **Courses taught**:
  - **Introduction to Game Development** (IL257-5 | CED106): This course focused on game development systems, tools and rapid workflows for creating interactive 3D and 2D content, multi-platform publishing environments, and managing assets for producing games for various platforms. Students learned how to create content with industry standard software and gained an introductory level understanding of the supporting applications used to build game ready assets.
  - **Introduction to 3D Production** (IL257-6): In this course, students learned foundation level concepts and skills related to 3D modeling, lighting, texturing, and animation in Maya. Upon successful completion, students should have had an understanding of the CG production pipeline for film and advertising through the creation of CG assets and short rendered movie files.

Portland State University Spring 2016 – Spring 2019

Adjunct Faculty

Program: School of Theater and Film

- **Courses taught**:
  - **Intro to 3D Modeling and Animation I** (FILM360): In this course, students learned foundational concepts and skills for creating 3D content in Maya. The course focused on poly modeling using proper topology while avoiding and/or fixing geometry errors, applying textures using files and manipulating UV coordinates with projections, lighting with standard lights (spot, point, directional) while evaluating the role lights play in a traditional 3-point+ setup, animating simple objects using the principles of animation, evaluating how each task weaves into the production pipeline, and rendering using the Maya Software rendering engine. This course was ideal for those who were beginners at 3D content creation.

- Image Manipulation – Introduction to Photoshop (FILM360): This course covered the fundamentals of image manipulation in a raster-based environment. Emphasis on tools, color management, scanning, filters, layering, masking, and channels for design, animation, textures, and compositing. Upon successful completion of this course, the students should have been able to successfully navigate and utilize the tools presented in Photoshop to manipulate and enhance digital images and to create original works through color theory and drawing techniques. This course was intended to be a practical introduction to the functionality of Photoshop and its uses within the world of media arts. The primary objectives were to practice effective file management and organization, develop technical skills in Photoshop and optionally InDesign, become exposed to professional production environments, develop efficient workflows within the software and utilize the software to achieve design tasks.
- Motion Graphics (FILM360): This hands-on course gave students a foundational look at how to create motion graphics for the purposes of advertising, storytelling, and communication using After Effects, and Photoshop. The course focused on interface exploration, file management and integration, non-destructive techniques, cross-platform workflows, rotoscoping, stabilizing and tracking footage, compositing, effects and animating. Upon successful completion, students should be able to navigate and utilize the tools presented in the software to manipulate and enhance digital images, footage, and animate graphical components. The primary objectives of this course were to navigate and utilize the tools presented in the software to manipulate and enhance digital images, footage, and animate graphical components, practice effective file management and organization, development efficient and non-destructive cross-platform workflows, utilize the software to achieve design tasks, analyze digital imagery with a critical eye and be able to speak to the technical components that comprise an image, demonstrate the layering of light in space to create mood, emotion and theme, become familiar with the principles of texturing, lighting, resolution, depth of field and overlapping graphical components, and gain basic concepts and understanding of tools related to compositing and animating graphics in After Effects.

➢ Faculty Responsibilities and Administrative Tasks:

- Performed student assessment of learning objectives based on course curriculum and exit competencies.
- Demonstrated a commitment to student success in fostering academic and career goals.
- Communicated constructive feedback throughout each course period, providing weekly feedback and review.
- Utilized available academic resources and directing students in ways that foster a successful learning experience.
- Assisted students in solving problems promptly that may impede successful course completion through advising and/or referrals.
- Communicated appropriately with other faculty, staff and administration and expressing ideas and thoughts to help develop the programs.
- Created an environment that acknowledges, encourages, and celebrates differences.
- Functioned and communicated effectively and respectfully within the context of varying beliefs, behaviors, orientations, identities, and cultural backgrounds.
- Collaborated in diverse, multicultural, and inclusive settings with a willingness to change for continual improvement.
- Facilitated meaningful learning of the course competencies in the curriculum and proactively supporting all facets of the learning environment.

- Provided education through learning-centered instruction that enabled graduates to fulfill the evolving needs of the marketplace.
- Encouraged a culture of learning that values mutual responsibility and respect, life-long learning, and ethics as well as personal and professional development.
- Created an environment that is conducive to innovation, positive thinking, and expansion.
- Designed and delivered class instruction through the development of instructional plans to meet course competencies, the development of activities which support lesson objectives.
- Promoted student success by showing flexibility in style and work schedule as well as exhibiting a passion for teaching and students and engaging students in the learning process.
- Managed the learning environment through keeping accurate records, submitting grades and other reports on time, and enforcing school/campus academic policies.
- Related professional/life/industry experience to learning by the continuation of professional/technical skills development, the introduction of industry perspective into courses, and the active awareness of professional/industry trends and opportunities.

The Art Institute of Portland

Faculty Member Spring 2008 – Jan 01, 2019
Academic Department Director 2015-2016
Career Service Advisor 2014-2015

➢ Courses taught:

Programs: Media Arts & Animation, Game Art & Design, Visual Effects & Motion Graphics

- **Introduction to Game Development** (GA101): This course provided an overview of the Games Industry and consisted of lectures, discussion, samples, in-class exercises, and hands-on game- play from each of the different generations. The class covered video game history, the rise of E-sports, design processes, technology summaries, publisher practices and motivations as well as exploration into human behavior in gameplay and marketplace appeal. As a part of the course, students were put into small teams and tasked with concepting and pitching unique game ideas to the class, acting as the review panel. Turn-in materials included concepting documents, outlines, game design documentation, sell sheets and finally the pitch.

- **3D Modeling and Animation I** (GA131): In this course, students learned foundational concepts and skills for creating 3D content in Maya. The course focused on poly modeling using proper topology while avoiding and/or fixing geometry errors, applying textures using files and manipulating UV coordinates with projections, lighting with standard lights (spot, point, directional) while evaluating the role lights play in a traditional 3-point+ setup, animating simple objects using the principles of animation, evaluating how each task weaves into the production pipeline, and rendering using the Maya Software rendering engine. This course was ideal for those who were beginners at 3D content creation.

- **3D Modeling and Animation II** (GA132): This course was an extension of GA131. Students further explored techniques and tools related to modeling, texturing, lighting, and animation. These skills culminated into a movie short. Upon successful completion students were able to or acquired an extended understanding of polygon modeling, a basic understanding of NURBs modeling tools and techniques, expanded skills in texturing and lighting (projections, simple shading networks, basic light rigs and render engines), a foundation in the principles of animation for both environmental assets and characters, a completed 30 second animated short.

- **Introduction to ZBrush/Digital Sculpting** (GA304): This course familiarized students with the concept of sculpting in the digital environment. Topics included utilizing the Zbrush interface effectively, sculpting photorealistic features into base models, painting techniques, and the Maya to Zbrush and Zbrush back out to Maya pipeline. Upon successful completion, students were able to or acquired an understanding of the basic principles of sculpting, utilize the tools and functions of the Zbrush interface to accomplish design tasks, understand the workflow between 3D Modeling applications and Zbrush within the production pipeline.

- **Comparative 3d Software** (GA334): This course familiarized students with the interface and tools of Autodesk's 3dsMax. Foundational skills acquired in pre-rec courses were applied to a co-equal, industry standard software application with the goal of effectively rendering photorealistic assets and environments. Upon successful completion of this course, students should have become comfortable with basics of modeling, animation, lighting, texturing plus UV Layout and rendering in 3DS Max, translated the skills they acquired in their Maya courses and translate them to 3DS Max.

- Advanced Lighting & Texturing for Games II (GA350): Students learned advanced concepts and techniques related to lighting and texturing for video game assets. In this course, they were introduced to and encouraged to explore and utilize a variety of resources to achieve their design goals. Lectures included retopologizing geometry, proper UV packing, tips and tricks for creating better normal maps, utilizing Quixel for textures, Marmoset Toolbag for rendering portfolio examples and in game engine setups.

- Advanced Lighting & Texturing II (GA362): This course familiarized students with the advanced features and processes of texturing, lighting, and rendering in a high-end 3D environment. There was an emphasis on critical thinking to aid in the development of highly photorealistic and stylized computer graphic imagery. Topics included the use of shaders, materials, UV layout, lighting, and camera control, rendering optimization, render layers/passes and compositing. This course had an emphasis on utilizing render nodes in conjunction with render layers and render passes to achieve photorealistic imagery through rendering and postproduction processes. Proficiencies in Photoshop and After Effects were helpful prior to entering the course. Upon successful completion students should have developed critical ideas for surface treatment and lighting, demonstrated the layering of light in space to create mood, emotion, and theme, became familiar with advanced principles of texture, lighting, and rendering, explored the capabilities of complex shading networks for time sensitive projects.

- Game Production Team (GA409 | GA412 | GA413): In this course, students worked collaboratively to finish an original interactive game/application. Students focused on a specific area of expertise but were exposed to all facets of the production process. The goal over the course of 3-4 terms: The creation of assets and elements of a interactive application, including design documentation, level designs, 3D art and models, and UI/UX design in a production team environment. This class was a collaborative group effort that was intended to simulate a professional studio environment. Consistent communication and adherence to class deadlines was crucial. Students who failed to perform at a professional level were dropped from the course.

- Image Manipulation – Introduction to Photoshop (MA136): This course covered the fundamentals of image manipulation in a raster-based environment. Emphasis on tools, color management, scanning, filters, layering, masking, and channels for design, animation, textures, and compositing. Upon successful completion of this course, the students should have been able to successfully navigate and utilize the tools presented in Photoshop to manipulate and enhance digital images and to create original works through color theory and drawing techniques. This course was intended to be a practical introduction to the functionality of Photoshop and its uses within the world of media arts. The primary objectives were to practice effective file management and organization, develop technical skills in Photoshop and optionally InDesign, become exposed to professional production environments, develop efficient workflows within the software and utilize the software to achieve design tasks.

- Advanced Lighting & Texturing I (MA362): This course familiarized students with the advanced features and processes of texturing, lighting, and rendering in a high-end 3D environment. Emphasis was on critical thinking and evaluation to the development of highly photorealistic and stylized computer graphic imagery. Topics included the use of shaders, materials, UV layout, atmosphere, lighting, camera control and rendering optimization. Additionally, the course focused on utilizing render nodes in complex shading networks to achieve stylized and photorealistic imagery while being render-time conscience and using render nodes to simulate often render heavy and complex visual effects and animation. Basic knowledge of particles and MEL scripting was a recommendation but not a requirement. Overall objectives were to develop critical ideas for surface treatment and lighting, demonstrate the layering of light in space to create mood, emotion, and theme, become familiar with advanced principles of texture, lighting, and rendering, and explore the capabilities of complex shading networks for time sensitive projects.

- Foundation Portfolio (MA377): Prepared second year students for their first portfolio review and introduced them to the post-graduate environment including contract and estimate writing. Course emphasis on a first pass round of branding and identity, and website creation to set a foundation going into Digital Portfolio (MA427).

- Media Arts Production Team (MA385 | MA485 | MA435): In this course, students worked collaboratively to finish an original short film. Students focused on their specific area of expertise but were exposed to all facets of the production process. The overall goal for three to four quarters was the creation of assets and elements of an animated short, including pre-production documents, 3D or 2D art and supporting graphics in a production-team environment. This class was a collaborative group effort that was intended to simulate a professional studio environment. Consistent communication and adherence to class deadlines was crucial. Students who failed to perform at a professional level were dropped from the course. Prerequisites: Jr. level & Instructor Approval

- Character Setup: Rigging (MA391): This course focused on how to use Maya's rigging tools to properly set up a character for use by an animator in a production environment. Upon successful completion of this course, students should have been able to extend their technical proficiency in Maya, setup a full body rig with IK Legs and IK/FK arms and a bendable back, create controls and custom attributes that allowed easy manipulation of the bound character, use weight painting to attach the geometry to the rig, enabling the animator to easily manipulate and keyframe the character, have a clear understanding of the rigging process, practice strong in-scene organization and management.

- Technical Direction (MA401): This course explored the fundamentals of Technical Direction with an emphasis on Maya's Dynamics, Hair, and Cloth. Additional course emphasis on Tracking, Lighting and Texturing, Rendering Techniques with Mental Ray, and most importantly creative problem solving and project accountability. Upon successful completion of this course, the student should have been able to successfully utilize Maya's tools pertaining to dynamics, hair simulation, cloth simulation and mental ray, and set up complex scenes for rendering by taking advantage of the render layers and passes system.

- Portfolio & Professional Practices (MA417): Students created a personal identity via style sheets and review sessions, to prepare for post-graduate work. This identity was represented through a professional facing website, business cards, and letterheads. Students learned how to create and maintain digital and non-digital portfolios. This course was a practical introduction into the process and techniques of creating a professional website and identity package. Students developed an understanding of effective graphic design and presenting themselves visually, technical skills using Dreamweaver and supporting software, and effective file management. Additionally, students were exposed to professional practices and the art of communicating with clients.

- Digital Portfolio (MA427): Students comprised a final portfolio demonstrating their best work. They developed an online presence and gained knowledge that prepared them to enter their industry. Additionally, they prepared materials for their Portfolio Show Presentation at the end of term/program. Emphasis was on professional development, conduct and best practices. Upon successful completion of this course, the students should have had a compilation of best work generated through their program, a customized, individual website with proper branding and user-friendly layout that highlights portfolio work, a professional Domain name associated with the website, a professional email address, and approved resumes with branding that include all pertinent information (job history, skills, education, contact info and URL). All branding should have been visually consistent to their website and business cards, approved business cards with branding that contains visual consistency to the website and resume, an ArtStation account (where applicable), a LinkedIn account and “take-aways” as well as other demos needed for a dynamic portfolio show presentation.

- Sr. Studio I & II (MA491 | MA492): In this course, students pitched a project related to their area of focus and were then tasked with seeing that project through to completion, with the intent of including that project in their portfolio. Students worked closely with the instructor to troubleshoot challenges and brainstorm ideas and best practices.

- Introduction to Visual Effects (VEMG 121): In this course, students learned foundational concepts and skills related to compositing in NUKE. Emphasis on concepts and procedures related to compositing using a node-based system, understanding the NUKE interface, tracking, keying and rotoscoping. Upon successful completion of this course, the students should have gained basic concepts and understanding of tools related to compositing in NUKE, become comfortable with the basics of tracking, keying and rotoscoping, and developed skills in asset collection for production.

- The History of Visual Effects and Motion Graphics (VEMG 281): This course provided an overview of the visual effects industry with an emphasis on modern and traditional techniques and their historical context. This survey class also explored major trends in the visual effects industry and identified career opportunities in the field. Upon successful completion of this course, the student should have been able to identify the pioneers of visual effects techniques, describe the use of miniatures for visual effects, the process of matte painting and the use of opticals, contrast historical techniques with contemporary digital solutions, identity the role of the VFX supervisor and examine industry trends in visual effects and identify employment requirements for visual effects job and prioritize elements of successful visual effects reel.

- 3D Effects I – Particles/Dynamics (VEMG 361): This course familiarized students with the advanced features and processes of creating dynamic effects, nParticles and Rigid Bodies in Maya. The emphasis was on applying critical thinking and evaluation to the development of photorealistic and stylized computer graphic imagery. Objectives for the course were to develop critical ideas of simulated dynamic effects, become familiar with advanced principles of texturing, lighting, and rendering as it pertains to effects and explore the capabilities of nParticles and rigid bodies.

- 3D Effects II – Fluids (VEMG 461): This course familiarized students with the advanced features and processes of creating dynamic effects using Maya's fluid containers. The emphasis was on applying critical thinking and evaluation to the development of photorealistic and stylized computer graphic imagery. Objectives for the course were to develop critical ideas of simulated effects, become familiar with advanced principles of texturing, lighting and rendering as it pertains to effects, and explore the capabilities of both 2D and 3D fluid Containers.

- Independent Studies: Students had the opportunity to take up to nine credits of Independent Studies, focusing on their area of specialty. Each project had instructor oversight and had two primary objectives, where were to produce work that would be included in their digital portfolio to be seen at their portfolio show and gain new skills specific to their focus. Each term I oversaw up to six studies in conjunction with my course load.

➢ Faculty Responsibilities and Administrative Tasks:

- Services to the college:
  - ❖ Faculty Council President (2018)
  - ❖ Faculty Council Member (2016-2018)
  - ❖ Member of the Portfolio Review Committee
  - ❖ Member of the Crisis Management Council
- Performed student assessment of learning objectives based on course curriculum and exit competencies.
- Demonstrated a commitment to student success in fostering academic and career goals.
- Communicated constructive feedback throughout each course period; provided weekly feedback and review.
- Utilized available academic resources and directed students in ways that fostered a successful learning experience.
- Assisted students in solving problems promptly that may have impeded successful course completion through advising and/or referrals.

- Communicated appropriately with other faculty, staff and administration and expressed ideas and thoughts to help develop the programs.
- Efficiently followed prescribed policies and procedures for administrative duties such as bookstore requisitions and software requests.
- Created an environment that acknowledged, encouraged, and celebrated differences.
- Functioned and communicated effectively and respectfully within the context of varying beliefs, behaviors, orientations, identities, and cultural backgrounds.
- Collaborated in diverse, multicultural, and inclusive settings with a willingness to change for continual improvement.
- Facilitated meaningful learning of the course competencies in the curriculum and proactively supported all facets of the learning environment.
- Provided education through learning-centered instruction that enabled graduates to fulfill the evolving needs of the marketplace.
- Encouraged a culture of learning that values mutual responsibility and respect, life-long learning, and ethics as well as personal and professional development.
- Created an environment that was conducive to innovation, positive thinking, and expansion.
- Designed and delivered class instruction through the development of instructional plans to meet course competencies, the development of activities which supported lesson objectives.
- Promoted student success by showing flexibility in style and work schedule as well as exhibited a passion for teaching and students and engaged students in the learning process.
- Managed the learning environment through accurate record keeping, submitted grades and other reports on time, and enforced school/campus academic policies.
- Contributed to a learning culture by participating on curriculum and system task forces, supported local campus events such as orientation and graduation, and participated in various other workshops and meetings.
- Related professional/life/industry experience to learning by the continuation of professional/technical skills development, the introduction of industry perspective into courses, and the active awareness of professional/industry trends and opportunities.
- Assisted the Department Director with term scheduling, student audits and course registration and curriculum development.

➢ Academic Department Director:

Programs: Media Arts & Animation, Game Art & Design, Visual Effects & Motion Graphics, Visual & Game Programming, Photography, Digital Film & Video

- Acted as the principal academic officer for the Media Arts and Animation, Game Art & Design, Visual Effects and Motion Graphics, Visual Game Programming, Photography & Design and Digital Film & Video programs.
- Assisted students toward successful program completion and staffing the classroom with instructors who supported the mission of the college.
- Co-responsible with the Campus Head of Academic Affairs for the fiscal well-being of the department as it is related to education.
- Participated in activities that promoted the stature of the department and the college and abided by the mandates set by the Board of Trustees, the President, and the Executive Committee.

- Provided academic leadership by selecting, training, developing, managing, and leading faculty and staff team members per the guidelines provided by the Campus Head of Academic Affairs.
- Taught a set number of courses as appropriate depending on program size.
- Facilitated annual evaluation of faculty members.
- Co-developed with the faculty members an annual faculty development plan and monitored progress on meeting those plans.
- Fostered student achievement, persistence, and success.
- Improved the student experience at the program level by assuring that the program exudes a culture of learning and excellence.
- Proactively worked with students who were at risk of not performing to their potential.
- Worked with academic advising and other departments to support student success related to attendance, classroom performance and time to graduation.
- Provided input into the planning and implementation of annual budgets including personnel, program expenses and capital needs.
- Supported college programs designed to achieve student completion rates including persistence plan, average registered credit goals, continuing SSB goals and advising students as they approach graduation.
- Assured that programmatic institutional effectiveness and student learning outcomes assessment were conducted and that the results of the assessment lead to meaningful instructional development.
- Collaborated with other Academic Department Directors within Ai and across schools in scheduling, sharing faculty, and other needs.
- Demonstrated superior organization, prioritization, and self-motivation skills.
- Interacted effectively as either a leader or as a member of a team while working collaboratively with other departments.
- Listened constructively and attentively to staff and students and responded positively to their requests.
- Demonstrated the ability to adapt to changing assignments and multiple priorities.
- Demonstrated the ability to manage multiple tasks and successfully meet deadlines.

➢ Career Service Advisor:

- Scheduled, conducted, and documented exit interviews with each pending graduate for the Media Arts & Animation, Game Art & Design, Visual Effects & Motions Graphics and Visual Game & Programming departments.
- Maintained a partnership between graduates and the Career Services Center to successfully assist graduates in finding employment within six months after graduation.
- Served as an advocate for students and graduates in the job search process, including salary negotiation.
- Developed, tracked, reported, and documented graduate employment programs, graduate files of employment, and success stories.
- Planned and conducted marketing calls and direct mail marketing follow-up with possible employers. Educated employers on curriculum and competitive compensation.

- Planned and conducted employer visits and on-campus recruiting. Actively and routinely sought employer feedback and researched industry trends. Shared this information when appropriate within the school to aid in the development/enhancement of curriculum and successful outcomes for graduates.
- Worked closely with the Professional Development Instructors and Director of Career Services to contribute to course content and coach graduates and students on career search strategies, personal marketing, interview skills, self-promotion methods and materials.
- Developed a partnership with Student Employment Advisors to maximize field-related opportunities for students as well as with Alumni Coordinator to maximize opportunities for graduates and industry networking.
- Demonstrated a high level of success in facilitating graduate employment by maintaining as high as a 94% placement rate (Spring 2015).

Oregon Storyboard, Portland, OR 2017

Virtual and Mixed Reality Instructor

- **Courses taught**:
  - **Intro to 3D Asset Creation for VR & MR** (GC101): This course was designed to familiarize students with the skills needed to successfully navigate software and hardware used in virtual and mixed reality content creation. Coursework for each discipline (UX, CG, Programming) was generated around capstone projects designed in collaboration with local industry partners. Students worked in cross-disciplinary teams to create VR/MR content for real world applications.

Clackamas Community College, Clackamas, OR 2016

Adjunct Faculty

Program: Digital Media Communications

- **Courses taught**:
  - **Hololens - Augmented Reality Development** (DMC199):
    - In October 2015, the Oregon Story Board and Clackamas Community College team was one of 5 grant recipients chosen for Microsoft's HoloLens Academic Research Grant. With this $100K grant and two HoloLens "mixed reality" devices from Microsoft, along with resources from partners at Intel, OSB created a custom classroom for teaching mixed reality content creation. OSB hosted HoloLens development and design classes for CCC students January through September of 2016.
    - Using software such as Unity and Maya and Microsoft's HoloLens, students created a holographic interactive auto transmission that they then deployed into CCC's Automotive Services Training classroom. **Governor Kate Brown** visited OSB and viewed the completed transmission though the HoloLens at the Inclusive Startup Fund media event at Oregon Story Board.
    - Was on the CCC and Oregon Storyboard team who was awarded a grant through Microsoft to develop trade-based education applications utilizing Microsoft's Hololens and the Unity game engine.
    - The DMC199 class was a controlled adventure into the unknown, with a goal to apply the combined talent of the Hololens grant team with some of the best minds in Portland, towards a new visual communication medium utilizing augmented reality with the Microsoft Hololens.
    - One of three lead instructors within this studio environment to help facilitate the success and completion of a real-world research project through the class. The final deliverable

will be a template for trade-based education that can be used by learning institutions worldwide.

- ❖ All course material and lesson plans built from scratch with foundational information provided by Microsoft's SDK and Hololens Academy.

- Introduction to Game Development (DMC111)
  - ❖ Taught introductory skills toward game development including basic modeling, texturing, and Unity functionality.
  - ❖ This course provided students with the skills needed to integrate 3D assets into a Unity-driven game design environment. It focused on game development skills and the processes required in today's interactive game design industry. Emphasis was on learning introductory skills in the following software packages - Unity, Maya, and Photoshop.

- Introduction to Media Arts (DMC100)
  - ❖ Taught an overview of career opportunities in the media industry and introduced success factors and entrance strategies, in addition to the history of the industry from film to online media.

Women In Animation, NW Chapter, Portland, OR 2009 – 2010
Founding Board Member

- ➢ Established group organizational structure in coordination with other community leaders.
- ➢ Helped coordinate and organize social, networking, and educational events geared toward fostering the dignity, concerns and advancement of women in the industry of art and animation.

Animation Dynamics Inc., Portland, OR
Technical Director 2007 – 2010

- ➢ Directed the technical approach of the 3D aspects of each project.
- ➢ Worked efficiently under deadline heavy situations.
- ➢ Generated polygonal and spline-based models (organic and hard surfaces) using 3ds Max and Maya.
- ➢ Oversaw all environmental and character texturing utilizing procedural textures, hand painted maps (Photoshop & Flash) and UV unwrapping techniques.
- ➢ Created all environmental and character light sets and rigs.
- ➢ Setup all scenes for rending and compositing utilizing render layers in conjunction with both Scanline and Mental Ray rendering engines.
- ➢ Oversaw the integrity and troubleshooting of all rendered content.
- ➢ Provided excellent customer service through prompt and professional communication regarding project specifications and scheduling.
- ➢ Worked with the Art Director to get all rendered content composited using After Effects for final client delivery.
- ➢ Troubleshot software and hardware issues that arose for the render farm as well as individual workstations.

Production Coordinator 2006-2007

- ➢ Efficiently assisted Executive Producer in project management and administrative duties.
- ➢ Organized and created internal production schedules for all staff and freelancers.
- ➢ Created production estimates based on internal scheduling, client need and competitive industry rates.

- Bridged correspondence between clients and ADi staff.
- Provided excellent customer service through prompt and professional communication.
- Answered frequent inquiries via digital communication, phone calls or in person meetings, regarding company structure, project processes and bids.
- Converted client CAD files to Maya files for ADi staff use.
- Tested and reviewed projects for quality and proper functionality in preparation for client reviews.

Dark Water Studios, Beaverton, OR 2005-2006
3D Hard Surface Modeler (Intern)

- Efficiently built computer generated hard surface prototypes for commercialized products.
- Utilized Adobe Illustrator and Macromedia Flash to generate character designs.

Chicago Mercantile Exchange, Chicago, IL 2004-2005
Website developer, Graphic Designer (Intern)

- Managed HTML content editing for the company's website, www.cme.com.
- Designed graphics for online courses.
- Used Rhythmics database software to contribute to the rebuilding of the company's online presence.

DePaul Publications: Web Media Services, Chicago, IL 2003-2004
Website developer, HTML editor

- Managed HTML content editing for client websites.
- Tutored clients on HTML structure and basic upkeep.

ASSOCIATED GROUPS

ACM SIGGRAPH Pioneer Member
Cascade SIGGRAPH PDX
Women in Animation
International Animated Film Association (ASIFA)
Portland Indie Game Squad (PigSquad)