COURSE TITLE	P CTE Advanced Digital Design Lab
DATE	2018/reviewed 2021
INDUSTRY SECTOR/PATHWAY	Arts, Media, and Entertainment / Design, Visual, and Media Arts
UC A-G APPROVED	Approved for f, fine arts credit, July 2018
GRADE LEVELS	11-12
OCCUPATIONS FOR IDENTIFIED PATHWAY	Digital Animator Artistic Director Commercial Artist Film:Director, Producer, Camera Person, Writer, etc. Technology Product Director CAD Engineer Motion Graphics Specialist Music, Sound and Foley Artist Game Designer, Concept Artist Quality Assurance Technicians or Testers Small Business Entrepreneurs
COURSE OVERVIEW	DESCRIPTION OF COURSE This course will emphasize the manipulation of artistic elements, media and competencies in and beyond the two-dimensional plane as well as in broadcast media including motion graphics, podcasting, film, Virtual Reality and emerging technologies. Students will create, manipulate, and analyze elements and media used to express feelings and communicate ideas. Students will become familiar with current practices and applications that include computer design and career focused digital design disciplines. In this capstone class students will be expected to specialize in one industry area and go deep in exploring and utilizing the tools and techniques that can be employed in that specific field. Prerequisite is Intermediate Digital Design Lab (Level 3). This course emphasizes hands-on experience and provides the opportunity for students to apply the techniques and aesthetics of historical perspective, current technologies, applications of design, and principles of 2D and 3D design, animation/video and storytelling. Students apply practical skills and knowledge of design while executing a project for a community client in a professional atmosphere. Visual design, information architecture, and production are all based

on the client goals, messages, and deadlines outlined during the project definition phase. Advanced media design techniques are implemented utilizing professional-level software and applications. Students work both individually and in teams to apply skills in all stages of digital design, distribution, and evaluation for clients in the community. Students also put into practice what it takes to run and work for a business as well as being an entrepreneur.

GOALS OF THE COURSE

CTE Advanced Digital Design Lab focuses on providing an opportunity for students to refine their skills using a variety of computer applications and processes according to student interest. Advanced students will choose an area of focus for the year that resides within the realm of Digital Design to explore and deepen personal skills based on a specific area of focus throughout the year.

Students will create functional and engaging creative interactive experiences from various points of view: design, usability, technique, and engagement. Students will create a digital portfolio to showcase final work. The course is project-based with six major projects created over the course of the year allowing the students to learn and apply the theory in the context of the project.

This course will afford students opportunities to participate in all aspects of the artistic process, including creation, presenting, producing, performing, responding, critiquing and connecting. The course will also, when appropriate, provide opportunities for students to discuss artistic ideas with other students, to read texts within the art discipline studied (including art works but also written critiques, etc.) and to write clearly and coherently on artistic topics. Students will blog about their process and final products on a regular basis.

This course will include a variety of assessments of conceptual artistic understanding as well as mastery of creative practices, skills and artistic literacies, and describe corresponding parameters to measure the course learning objectives. These measures could include, but are not limited to, authentic performance and/or exhibition opportunities, discipline-appropriate creative projects, collaborative projects, student portfolios, written exams, research and written projects, and multimedia presentations.

This Advanced course provides ways for students to take on more leadership roles and functions in all group projects such as becoming project managers, creative directors, executive producers and producers. Students will create and manage group benchmarks and roadmaps and be responsible for interfacing between teams and teacher or clients.

MAJOR COURSE OBJECTIVES Students will be able to:

1. Utilize digital design to express ideas in visual terms.

2. Exhibit an understanding of key design elements, concepts and terminology related to field of interest.

COURSE CONTENT	 Unit 1: Passion Project 1. Seek out and complete real-life professional challenge that has authentic audience for final product 2. Identify what needs to be done, when, and why 3. Set personal goals, identify strategies for success, set personal benchmarks 4. Identify learning resources, both online, from instructor, and from outside mentors in industry 5. Document learning process, obstacles and successes as a creative problem solving, personal insights as a learner 6. Communicate and critique using the appropriate professional and technical terminology 7. Students give and receive constructive criticism using the Design Thinking model 8. Learning defense presentation to showcase learning process and final product Sample Assignments or Projects Students will create final work for HitRecord.com, an online professional production company that offers opportunities for production professionals to collaborate and create assets for payment on real-world projects such as commercials, books, films, etc. Students will work on projects such as animation, illustration, voice over recordings, script writing, editing and more, some that have monetary rewards that are associated with the project and some that do not. They will seek out sources of technical information from the instructor, online and from professional mentors.
	 Demonstrate the ability to create personalized learning plans, benchmarks, feedback and assessments for final work. Demonstrate the project management and time management skills needs to complete a Digital Design project from beginning to end. Demonstrate team collaboration skills, interpersonal communications and working with multiple teammates to complete a project. Analyze and make critical assessments about digital designs using correct visual arts or industry vocabulary in written and oral formats. Engage in processing, analyzing and responding to sensory information through the skills, methods and language appropriate to the specific arts discipline. Develop confidence and fluency in working within an art form by acquiring the skills required to create, produce, perform and present works of art. Gain an understanding of the historical contributions and cultural dimensions of the arts. Apply understandings developed within an art form to the other arts and academic disciplines.

<u>Anchor Standards:</u> 1.0, 2.1-2.6, 3.1-3.9, 4.1-4.6, 5.1-5.4, 6.2, 7.1-7.8, 8.1-8.7, 9.1-9.7, 10.1-10.4, 11.1-11.5 <u>Pathway Standards:</u> A1.1, A1.2, A1.3, A1.4, A1.7, A2.1, A2.2, A2.3, A2.4, A2.5, A2.6, A2.7, A2.8, A2.9, A3.1, A3.3, A3.4, A3.5, A3.6, A4.3, A4.4, A4.5, A4.6, A5.2, A5.3, A5.5, A5.6, A5.7, A7.1, A7.2, A7.3, A7.5, A8.1, A8.2, A8.3, A8.4, A8.5, A8.6, A8.7

Unit 2: Application of Design Elements

- 1. Identify top Design Elements used in digital arts including but not limited to, use of negative space, hierarchy, texture, repetition, symmetrical and asymmetrical balance, contrast, color, etc.
- 2. Identify the use of design elements out in industry and make connections between professional work and student work
- 3. Investigate the role and function of professional organizations and online communities to support careers in digital design.

Sample Assignments or Projects

Students will create a final digital design piece that has an authentic and real audience. Publishing or showcasing of work to professionals in industry or to the greater community will be expected. Students must secure venues for work to be shown or shared with community which may include published writing, film entered into public competition, final artwork displayed in public forum, motion graphics completed for real-world client. Student work will highlight and be informed by several design elements used to create visually pleasing final product. Students give and receive constructive criticism utilizing industry vocabulary. Revisions are made to refine finished product.

<u>Anchor Standards:</u> 2.5, 3.1, 3.5, 3.6, 3.7, 3.8, 3.9, 5.1, 5.2, 5.3, 5.4, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 9.5, 9.6, 9.7, 10.1, 10.2, 10.3, 10.4, 11.1, 11.2, 11.3, 11.4, 11.5 <u>Pathway Standards:</u> A1.2, A1.3, A1.4, A1.6, A1.7, A1.8, A1.9, A2.2, A2.3, A2.4, A2.5, A2.6, A2.7, A2.8, A2.9, A3.4, A4.2, A4.3, A4.4, A4.6, A5.1, A5.3, A5.4, A5.6, A6.1, A6.2, A8.1, A8.2, A8.3, A8.4, A8.5, A8.6, A8.7

Unit 3: Installation Piece for Community

- 1. Identify the role of Digital Design in society as a catalyst for change
- 2. Explore the role of project management and design thinking in design creation
- 3. Distinguish between art for art's sake versus creation for client or problem solving

Sample Assignments or Projects

Students will explore creating a 2D or 3D sculptural piece for the local Rail Arts District or other venue. They will create mockups through Computer Aided Design software and through traditional materials such as wood, clay and paper. They will work with local metal and fiberglass workers to actualize final artwork. Artwork will be informed by local issues and design elements.

<u>Anchor Standards:</u> 2.5, 3.1, 3.5, 3.6, 3.7, 3.8, 3.9, 5.1, 5.2, 5.3, 5.4, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 9.5, 9.6, 9.7, 10.1, 10.2, 10.3, 10.4, 11.1, 11.2, 11.3, 11.4, 11.5 <u>Pathway Standards:</u> A1.1, A1.2, A1.5, A1.6, A2.5, A3.1, A3.2, A3.3, A3.4, A3.5, A3.6, A4.1, A4.2, A4.3, A4.4, A4.5, A4.6, A5.1, A5.2, A5.4, A6.1, A6.2, A6.3, A8.7

Unit 4: Entrepreneurial Mindset in the Gig Economy

In this unit students compare the profiles of successful entrepreneurs, explain the importance of a personal brand, and become familiar with business opportunities in the Gig Economy using Design Thinking and creative problem solving. They will demonstrate the importance of portraying the proper image of a successful entrepreneur, including attitude, attire, and behavior, and model the importance of an entrepreneur's ethical and social responsibilities.

Sample Activities

Entrepreneurs: Students compare and contrast being an employee vs a freelance worker. Students research the pros and cons of the gig economy and research trends in the digital design workplace and future job outlook. Students will analyze characteristics and strategies common to successful entrepreneurs for comparison to their own. They will share in teams and identify what roles they are most suited to. Students will explore managing money and how to market themselves in the gig economy.

Personal Brand/Marketing and Roadmapping: Students will examine/create their personal brand in terms of social media, various platforms, logo, blogging with voice, understanding backstory, finding appropriate voice, online tribes and networking. Students will summarize their personal purpose, philosophy and skill base as it relates to industry. Students will work intensively on creating an ongoing digital presence that establishes them as an expert in their field of interest and set short and long-term goals for their own professional trajectory that will inform their personal roadmap.

Social Responsibility: Students will evaluate the central role their skills-based brand plays in society by initiating innovative ways to improve the quality of life locally, and globally and presenting to the class.

<u>Anchor Standards:</u> 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2, 5.3, 5.4, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 10.1, 10.2, 10.3, 10.4, 11.1, 11.2, 11.3, 11.4, 11.5 <u>Pathway Standards:</u> A1.5, A2.5, A3.1, A3.2, A3.3, A3.4, A3.5, A3.6, A4.1, A4.2, A4.3, A4.4, A4.5, A4.6, A5.2, A5.3, A5.4, A5.5, A5.6, A8.1, A8.2, A8.3, A8.4, A8.5, A8.6, A8.7

Unit 5: Team Roles and Goals

Students define the responsibilities of each position in the project team and assign roles accordingly. They gather and analyze information about the client, their target audiences, and their competition. They develop user profiles based on target audience research as well as functional requirements based on the client goals. They also prepare a communication brief that summarizes the visual and conceptual goals of the project that they present to clients.

Sample Activities

Brief: Students will prepare a communication brief that summarizes the visual and conceptual goals of the project.

Schedule: Students will create a schedule that includes visual design, information architecture, and production milestones.

Testing: Students will choose types of usability testing to employ and schedule each phase of testing.

Communication: Students will listen and communicate ideas effectively in a discovery and kick-off meeting with the client.

<u>Anchor Standards:</u> 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2, 5.3, 5.4, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 10.1, 10.2, 10.3, 10.4, 11.1, 11.2, 11.3, 11.4, 11.5 <u>Pathway Standards:</u> A1.1, A3.2, A4.1, A4.2, A4.4, A4.6

Unit 6: Design Process

Students go through the design process (observation, ideation, rapid prototyping, user feedback, iteration, implementation) to work through the kinks of their proposed designs/solutions. At this point, they are mostly focused on rapid prototyping, user feedback, and iteration. Students work with members of the visual design team to develop possible design concepts; to choose colors, styles, music, typefaces, etc. that communicate the tone and message specified in the creative brief; to choose or create imagery that communicates the tone and message specified in the creative brief. They also create drafts/prototypes using professional software that communicate a design direction to be presented to the client.

Sample Activities

Rapid Prototyping: In this phase students quickly build a simple prototype of their idea. This makes it tangible and gives them something to test with the end-user. Students ask themselves: What can I spend the minimum amount of time building that will allow me to get user feedback as quickly as possible? The purpose of this phase isn't to create the perfect solution, it's to make sure the solution is on target.

User Feedback: Students get their simple prototype into the hands of the people they are designing for (the clients).

This is the most critical phase of the human-centered design process. Without input from the end-user students won't know if their solution is on target or not, and they won't know how to evolve their design.

Iteration: Once students get feedback from their users, they use that information to fuel the changes to the design. They keep iterating, testing, and integrating user feedback until they've fine tuned their solution. This may take a few (or many) rounds. Once they've gotten their solution to a point where it's ready to be used, it's time to move on to the next and final phase.

<u>Anchor Standards:</u> 1.0, 2.1-2.6, 3.1-3.9, 4.1-4.6, 5.1-5.4, 7.1-7.8, 8.1-8.7, 9.1-9.7, 10.1-10.4, 11.1-11.5 <u>Pathway Standards:</u> A1.2, A1.5, A1.7, A1.9, A2.1, A2.4, @.5, A2.6, A2.7, A2.8, A3.1, A3.2, A3.6, A4.2, A4.3, A4.4, A4.5, A4.6, A5.5, A5.6, A5.7, A7.1, A7.2, A7.3, A7.4, A7.5, A8.1, A8.2, A8.3, A8.4, A8.5, A8.6, A8.7

Unit 7: Industry - Markets & Careers

Building on work done in previous classes, students compare and contrast occupations and careers within the digital design and related technical fields, and identify the personal qualifications, interests, aptitudes, knowledge, and skills necessary to succeed in careers for this sector. They also investigate the role and function of professional organizations. The goal of this unit is for students to reflect on and create their own individual plans and goals related to progression in the industry.

Sample Activities

Digital Portfolio: Students create/update a personal professional website to be the home of their digital portfolio. Website creator is up to the student, examples are Google Sites, Blogger, Wix, Weebly, etc. The website should represent the uniqueness of the student, while also being professional and appropriate for student's chosen career. Personal style and aesthetic should add to the originality of the site, but it should not distract from the content. The site needs to be appealing to a larger global audience, so the font style should be easy to read and consistent throughout. Contents should include:

- professional profile (updated from previous course work)
- resume
- SMART goals including personal goals, education and career goals along with plan for getting there
- letters of recommendation

Students will update the portfolio throughout the course with posts and reflections. Students present their digital portfolios to an authentic audience and use it to apply to post-secondary education and internships/employment.

Anchor Standards: 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.3, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 8.1, 8.2, 8.3,

	 8.4, 8.5, 8.6, 8.7, 9.1, 9.4, 9.6, 11.4, 11.5 Pathway Standards: A2.5, A5.6, A7.2,A8.5, A8.7 Unit 8: Final Print Product Export files in a variety of formats to fit needs of printing and distribution Identify techniques utilized in current media examples for print publication Mimic current industry techniques in design principles and in execution Upload and manage digital assets from the camera, photoshop, and illustrator into an inDesign Document for publication, magazine or professional book. Sample Assignments or Projects Students will use Photoshop, Illustrator and InDesign to create a professionally created magazine or book to be distributed as a viable sellable product. Students may be eligible for early college credit through DART 120 at Napa Valley College Anchor Standards: 1.0, 2.1-2.6, 3.1-3.9, 4.1-4.6, 5.1-5.4, 7.1-7.8, 8.1-8.7, 9.1-9.7, 10.1-10.4, 11.1-11.5 Pathway Standards: A1.1, A1.2,A1.3, A1.7, A2.1, A2.2, A2.5, A2.6, A2.7, A2.8, A3.1,A3.2, A3.3, A4.1, A4.3, A4.4, A4.5, A4.6, A5.2, A5.3, A5.5, A5.6, A6.1, A7.1, A7.2, A7.3, A7.4, A7.5, A8.1, A8.2, A8.3, A8.4, A8.5, A8.6, A8.7
PREREQUISITES	 A minimum of 2 years of Digital Design classes are required. Examples include: Design and Computer Science Game Design and Special Effects Intermediate Digital Design Lab, level 3 (recommended)
ACADEMIC CREDIT	1 year/10 credits
CERTIFICATION	Adobe Certification
ARTICULATION	Try to articulate with NVC DART 120
INSTRUCTIONAL STRATEGIES	Project-Based Learning Multimedia Sources Work-Based Learning Lecture and Demonstrations

INSTRUCTIONAL MATERIALS / TEXTBOOKS	In lieu of core textbook, the following main resources and software programs to be used for instruction are: Adobe Illustrator, Photoshop, After Effects, Premiere, Character Animate and Animate. Instructional Videos Online Tutorials Simplymaya.com Iynda.com projectspark.org khanacademy.org Code.org CTE Online (www.cteonline.org)
STANDARDS SUMMARY	Knowledge and Performance Anchor Standards 1.0, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3., 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2, 5.3, 5.4, 6.2, 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 10.1, 10.2, 10.3, 10.4, 11.1, 11.2, 11.3, 11.4, 11.5 Design. Visual. and Media Arts Pathway Standards A1.1, A1.2, A1.3, A1.4, A1.5, A1.6, A1.7, A1.8, A1.9, A2.1, A2.2, A2.3, A2.4, A2.5, A2.6, A2.7, A2.8, A2.9, A3.1, A3.2, A3.3, A3.4, A3.5, A3.6, A4.1, A4.2, A4.3, A4.4, A4.5, A4.6, A5.1, A5.2, A5.3, A5.4, A5.5, A5.6, A5.7, A6.1, A6.2, A6.3, A7.1, A7.2, A7.3, A7.4, A7.5, A8.1, A8.2, A8.3, A8.4, A8.5, A8.6, A8.7 Common Core and Academic Standards: LS 11-12.1-10, WS: 11-12.10, WHSST 11-12.1-10, A-CED 1.1-4, F-IF 1-6, F-LE 1-3, G-CO 1-4, G-GMD 4-5, G-MG 1-3, S-ID 1-6, S-MD 5, SEP 1-6, 8, CC 1, PS 1.A, 2.C, 4.C, LS 1.A, 1.C, 1.D, 2.A, 4.A, 4.B, 4.D, ETS 1.A, 1.B, 1.C, 2.A, 2.B, AD 12.8, 12.8.2, 12.10, PE 12.1, 12.2, 12.3, 12.4, 12.6, US 11.5, 11.5.2, 11.5.5, 11.5.6, 11.8, 11.11, 11.11.3, WH 10.3, 10.6, 10.8.5, 10.11