



### High School Course of Study Approval Request Form

High School Site	Signature - Principal or Academic AP Designee	Signature - Teacher Leader (enter N/A if no Teacher Leader)	Comments:
American Canyon HS	Andrew Goff	N/A	
Napa HS	Ean Ainsworth	Ron Solomon	
Napa Valley Independent Studies	Susan Wilson	NA	
<b>New Tech HS</b>	Riley Johnson	Lisa Gottfried	
Valley Oak HS	Maria Cisneros	N/A	
Vintage HS	Katelyn Estudillo	John Castillo	

Course submitted by:	Gillie Miller	School Site:	NCOE CTE Office
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Executive Director, Secondary Education: \_\_\_\_\_

#### Review resources:

[Rubric for Evaluating Digital Content & Technology Tools in Relation to CCSS for ELA \(Grades 6-12\)](#)

[State Math criteria](#)

[Technology in Teaching Math](#)

[Other criteria and decision making tools](#)

Please review following high school course outline and sign above if you approve or write reason in comment area if you do not.

☒ **New**   ☐ **Revised**

**COMPUTER (Short) TITLE:** P CTE Int Digital Dsgn  
**COURSE (Long) TITLE:** P CTE Intermediate Digital Design Lab  
**AERIES TITLE:** P CTE Intermd Digital Dsgn Lab  
**COURSE NUMBER:** CTExxx  
**GRADE LEVEL:** 10 - 12  
**LENGTH OF COURSE:** 1 year/10 credits (5 credits/semester)  
**GRAD REQUIREMENT:** Visual Performing Arts (V)  
**CSU/UC REQUIREMENT:** "f" (Visual and Performing Arts)  
**COLLEGE PREP:** Yes  
**VOCATIONAL ED:** Concentrator  
**CALPADS CODE:** 7211  
**PATHWAY CODE:** DVMA 111 Subpathway 111A  
**NCLB :** No

## **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. This course is meant to give students a very broad understanding of the tools and techniques that can be employed in any field of Digital Design and all projects will be student chosen. Prerequisite is Design and Computer Science.

This course emphasizes hands-on production 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 pre-production, production, and post-production stages of digital media design, distribution, and evaluation for clients in the community. Students also learn what it takes to run and work for a business as well as being an entrepreneur.

### **GOALS OF THE COURSE**

CTE Intermediate Digital Design Lab focuses on providing an opportunity for students to explore a variety of computer applications and processes according to student interest. 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.

### **MAJOR COURSE OBJECTIVES**

Students will be able to:

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

Demonstrate the ability to create personalized learning plans, benchmarks, feedback and assessments for final work.

Demonstrate the project management and time management skills needed 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. 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.

## **COURSE CONTENT**

### **Unit 1: Passion Project**

Seek out and complete real-life professional challenge that has authentic audience for final product

Identify what needs to be done, when, and why

Set personal goals, identify strategies for success, set personal benchmarks

Identify learning resources, both online, from instructor, and from outside mentors in industry

Document learning process, obstacles and successes as a creative problem solving, personal insights as a learner

Communicate and critique using the appropriate professional and technical terminology

Give and receive constructive criticism using the Design Thinking process

Create a Learning Defense presentation to showcase learning process and final product

#### **Sample Assignments or Projects**

Students will explore and create final work for HitRecord.com, an online professional production company.

Students will explore projects such as animation, illustration, voice over recordings, script writing, editing and more. They will seek out sources of technical information from the instructor, online and from professional mentors.

Anchor Standards: 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

Pathway Standards: A1.1, A1.2, A1.3, A1.4, A1.7, A2.1, A2.2, 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**

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.

Identify the use of design elements out in industry and make connections between professional work and student work

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.

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: A1.2, 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**

Identify the role of Digital Design in society as a catalyst for change

Explore the role of project management and design thinking in design creation

Distinguish between art for art's sake and creation for client or problem solving

#### **Sample Assignments or Projects**

Students will create 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 as needed. Artwork will be informed by local issues and design elements.

Anchor Standards: 1.0, 2.1-2.6, 3.1-3.9, 4.1-4.6, 5.1-5.4, 6.1-6.7, 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, A1.5, 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: 3D Modeling or Motion Graphic Software (Intermediate)**

Explore the applications used to generate 3D assets or motion graphics for use in film, television, game development, and architecture.

Use of perspective, mesh, and animation, or motion using X, Y, Z axes

Define a virtual workspace (scene) to implement and edit media of a particular project

#### **Sample Assignments or Projects**

Students will explore how to work in Fusion 360 to create one element of a walking Strandbeest, by the world renown artist, Theo Jansen. They will create one working "leg" that can be printed and combined with other "legs" from other students to make a walking strandbeest. In the process students will learn how to model for Manufacturing and Engineering, using constraints and other geometric vocabulary. They will also explore the sculpt mode which is similar to 3D modeling software for Gaming Design and Art. Students will also learn how to export an animation of their working simulation of a moving leg, which can then be applied to creating short movies or motion graphics of their 3D models. Students may also opt to explore the workings of After Effects to make an intro or outro for use in films.

Anchor Standards: 1.0, 2.1-2.6, 3.1-3.9, 4.1-4.6, 5.1-5.4, 6.2-6.6, 7.1-7.8, 8.1-8.7, 9.1-9.7, 10.1-10.4, 11.1-11.5

Pathway Standards: A2.1, A2.2, A2.4, A2.6, A2.7, A2.8, A2.9, A3.1, A4.3, A4.4, A4.5, A4.6, A5.1, A5.4, A5.6, A7.4, A8.1, A8.2, A8.3, A8.4, A8.5, A8.6, A8.7

### **Unit 5: Video Production**

Introduction to lighting: 3-point, studio, and outdoors

Digital Audio Production:

Utilize various Audio file formats

Download Internet audio files from open-source sites

Record and edit voice narration

Utilize multiple audio tracks in a project

Camera Angles and moving shots

Understand concepts of composition, perspectives, and point of view

Demonstrate effective use of various camera angles and moving shots

Set-up and properly use a video camera using a variety of shooting techniques.

Understand the processes to clean and maintain camera equipment.

#### **Sample Assignments or Projects**

Students will break into smaller teams of 3-4 and choose roles within that team. Each team will concentrate on a specific end product that requires specific skill sets. For example, one team will create a radio show and concentrate solely on script writing and capturing great audio. Another team will create a man-on-the-street video and concentrate on proper lighting and mic usage. Another team will concentrate on creating a mini-documentary complete with data motion graphics, research to make evidence based claims and working with three-point lighting.

Anchor Standards: 1.0, 2.1-2.6, 3.3., 4.1-4.6, 5.1-5.4, 6.2-6.6, 7.1-7.8, 8.1-8.7, 9.1-9.7, 10.1-10.4, 11.1-11.5

Pathway Standards: A1.1, A1.3, A1.5, A1.7, A1.8, A2.1, A2.2, A2.4, A2.5, A2.6, A2.7, A2.8, A2.9, A3.1, A4.3, A4.4, A4.6, A5.1, A5.4, A5.6, 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

#### **Unit 6: Post Production: Editing Skills**

Apply proper transitions, edits, titles, effects, media output and control

Explore Editing Dialogue: L and J cuts

Identify and learn Non-linear editing and story arcs: Cutaways, B-roll, subplots

Analyze use of effects to enhance story or overall messaging

#### **Sample Assignments or Projects**

All students will take whatever footage they have captured in their teams and edit their pieces.

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, A2.1, A2.2, A2.4, A2.5, A2.6, A2.7, A2.8, A2.9, A4.2, A4.3, A4.4, A4.5, A4.6, A5.4, 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

#### **Unit 7: 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

## **INSTRUCTIONAL STRATEGIES**

Lecture and Demonstrations

Multimedia Sources

Project-Based Learning

Work-Based Learning

## **METHODS OF ASSESSING STUDENT PROGRESS**

Written Quizzes/Exams demonstrating a working knowledge of industry terms, operational commands, and modeling and animation elements and principles.

Student Presentations and project-based assignments will be presented, completed and graded according to rubrics provided to students prior to beginning projects.

Students will maintain an electronic portfolio of their work.

## **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

lynda.com

projectspark.org

khanacademy.org

Code.org

CTE Online ([www.cteonline.org](http://www.cteonline.org))

## **STANDARDS SUMMARY**

Arts, Media, and Entertainment 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 11-12.1-6, RSL 11-12.1-10, RSIT 11-12.1.-7, RHSS 11-12.1-9, RLST 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