eDynamic Learning Course Title: Foundations of Game Design 1a / 1b

State: TX
State Course Title: Video Game Design
State Course Code: 130.93
State Standards: Video Game Design
Date of Standards: 2015

TEKS	Course Title. (a or b), if applicable, e.g. Game Design 1a	Unit Name(s)	Lesson(s) Numbers
(1) The student demonstrates professional standards/ employability skills as required by business and industry.			
(A) identify and demonstrate positive work behaviors and personal qualities needed to be employable.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 1
(B) demonstrate skills related to seeking and applying for employment.	Foundations of Game Design 1a: Introduction	Unit 3: A Peek into the Game Industry	Lesson 2
(C) create a career portfolio to document information such as work experiences, licenses, certifications, and work samples.	Foundations of Game Design 1b: Storytelling, Mechanics and Production	Unit 8: The Future of Gaming	Lab
(D) demonstrate skills in evaluating and comparing employment opportunities.	Foundations of Game Design 1a: Introduction	Unit 3: A Peek into the Game Industry	Lesson 2
(2) The student applies academic knowledge and skills in video game design projects.			
(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents.	Foundations of Game Design 1a: Introduction	Unit 5: Developing a Game Design Document	Lesson 2
(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 6: Immerse Your User	Lesson 1
(3) The student understands professional communications strategies.			
(A) adapt language for audience, purpose, situation, and intent.	Foundations of Game Design 1a: Introduction	Unit 3: A Peek into the Game Industry	Lessons 1-3
(B) organize oral and written information.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 4

(C) interpret and communicate information.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 4
(D) apply active listening skills.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 4
(E) communicate with diverse individuals.	Foundations of Game Design 1a: Introduction	Unit 5: Developing a Game Design Document	Lesson 2
(4) The student understands and employs problem-solving methods and conflict-management skills.			
(A) employ critical-thinking skills independently and in groups.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 7: Testing, Testing 1,2,3	Lesson 3
(B) employ interpersonal skills in groups to solve problems.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 4
(5) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 2
(6) The student applies leadership characteristics to student leadership and professional development activities.			
(A) demonstrate leadership skills.	Foundations of Game Design 1a: Introduction	Unit 5: Developing a Game Design Document	Lesson 3
(B) participate in a group setting.	Foundations of Game Design 1a: Introduction	Unit 3: A Peek into the Game Industry	Lessons 1, 2
(7) The student applies ethical decision making and understands and complies with laws regarding use of technology in video game design.			
(A) exhibit ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 1
(B) discuss and apply copyright laws.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 2
(C) model respect of intellectual property.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 2
(D) demonstrate proper etiquette and knowledge of acceptable use policies.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 2
(E) analyze the impact of the video game design industry on society.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 1
(8) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.	Foundations of Game Design 1a: Introduction	Unit 5: Developing a Game Design Document	Lesson 3
(9) The student develops an understanding of video game design.			
(A) demonstrate knowledge and appropriate use of computer operating systems.	Foundations of Game Design 1a: Introduction	Unit 1: From King Tut to Mario: A History of Gaming	Lessons 2, 3

(B) demonstrate appropriate use of hardware components, software programs, and storage devices.	Foundations of Game Design 1a: Introduction	Unit 1: From King Tut to Mario: A History of Gaming	Lessons 2, 3
(C) demonstrate knowledge of sound editing.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 6: Immerse Your User	Lesson 3
(D) demonstrate knowledge of file formats and cross-platform compatibility.	Foundations of Game Design 1a: Introduction	Unit 5: Developing a Game Design Document	Lesson 3
(E) acquire and exchange information in a variety of electronic file sharing formats.	Foundations of Game Design 1a: Introduction	Unit 5: Developing a Game Design Document	Lesson 3
(F) evaluate visual information by recognizing the use of principles and elements of design.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 1: Get Artistic	Lessons 1-3
(10) The students employs an appropriate design process to create and modify solutions to problems.			
(A) combine graphics, images, and sound.	Foundations of Game Design 1b: Storytelling, Mechanics and Production	Unit 3: Enter Level One	Lessons 1-3
(B) apply principles of design.	Foundations of Game Design 1b: Storytelling, Mechanics and Production	Unit 3: Enter Level One	Lessons 1-3
(C) develop and reference technical documentation.	Foundations of Game Design 1a: Introduction	Unit 5: Developing a Game Design Document	Lessons 1-4
(D) edit products.	Foundations of Game Design 1b: Storytelling, Mechanics and Production	Unit 3: Enter Level One	Lessons 1-3
(11) The student researches the history and evolution of video game design.			
(A) explain the history of video game design.	Foundations of Game Design 1a: Introduction	Unit 1: From Tut to Mario: A History of Gaming	Lessons 1, 2
(B) describe how changing technology is affecting the industry.	Foundations of Game Design 1a: Introduction	Unit 1: From Tut to Mario: A History of Gaming	Lessons 1, 2
(C) analyze the use of symbols in video game design of diverse cultures.	Foundations of Game Design 1a: Introduction	Unit 1: From Tut to Mario: A History of Gaming	Lessons 1, 2
(D) compare current video game design technologies with historical technologies.	Foundations of Game Design 1a: Introduction	Unit 1: From Tut to Mario: A History of Gaming	Lessons 1, 2

(E) compare various styles of video game design.	Foundations of Game Design 1a: Introduction	Unit 2 - What's in a Game?	Lesson 3
(F) explore emerging and innovative video game design technologies and software.	Foundations of Game Design 1a: Introduction	Unit 1: From Tut to Mario: A History of Gaming	Lessons 1, 2
(12) The student understands and applies video game design principles, elements, and techniques.			
(A) employ audience identification, script writing, character design, storyboarding, and audio and delivery formats.	Foundations of Game Design 1a: Introduction	Unit 2 - What's in a Game?	Lesson 2
(B) describe and use motion paths, scripting, programming, and interactivity.	Foundations of Game Design 1a: Introduction	Unit 4: Let's Talk Shop About Game Design	Lesson 1
(C) describe lighting and perspective.	Foundations of Game Design 1a: Introduction	Unit 4 - Let's Talk Shop about Game Design; Unit 6: Game Visuals	Unit 4 - Lessons 1-3: Unit 6 - Lessons 1-3
(D) describe and use production processes such as titles, credits, and special effects.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 4 - Let's Talk Shop about Game Design	Lessons 4, 5
(13) The student evaluates a product using critical-thinking skills. The student is expected to evaluate products and product quality against established criteria and rubrics.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 7: Testing, Testing 1,2,3	Lesson 3
(14) The student presents oral or written evaluations of video game design projects.			
(A) identify the intended audience.	Foundations of Game Design 1a: Introduction	Unit 2 - What's in a Game?	Lesson 2
(B) describe aesthetics.	Foundations of Game Design 1a: Introduction	Unit 4: Let's Talk Shop About Game Design	Lesson 1
(C) explain the storyline.	Foundations of Game Design 1a: Introduction	Unit 4 - Let's Talk Shop about Game Design	Lesson 4
(D) summarize subject matter.	Foundations of Game Design 1a: Introduction	Unit 4 - Let's Talk Shop about Game Design	Lesson 4
(E) discuss the use of sound.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 6: Immerse Your User	Lesson 3
(15) The student creates video game design projects. The student is expected to use a variety of techniques and software programs.	Foundations of Game Design 1a: Introduction	Unit 5: Developing a Game Design Document	Lesson 2
(16) The student differentiates current programming languages.			
(A) discuss the use of computer programming languages in other fields of study.	Foundations of Game Design 1a: Introduction	Unit 3: A Peek into the Game Industry	Lesson 4

(B) demonstrate knowledge of specific programming terminology and concepts.	Foundations of Game Design 1a: Introduction	Unit 3: A Peek into the Game Industry	Lesson 4
(17) The student applies problem-solving strategies. The student is expected to apply design specifications, step-wise refinement, or algorithm development.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 7: Testing, Testing 1,2,3	Lesson 3
(18) The student develops coding with correct and efficient use of expressions. The student is expected to use user-defined functions. proper operator precedence. sequential, conditional, and repetitive control structures.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 4: Get Physical	Lessons 1-3
(19) The students applies constructive criticism to products. The student is expected to seek and respond to advice from peers and professionals in delineating technological tasks.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 7: Testing, Testing 1,2,3	Lesson 3
(20) The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge.			
(A) participate with electronic communities as a learner, initiator, contributor, and teacher or mentor.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 1
(B) extend the learning environment beyond the school walls with digital products created to increase teaching and learning in the foundation and enrichment curricula.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 1
(C) participate in relevant, meaningful activities in the larger community and society to create electronic projects.	Foundations of Game Design 1a: Introduction	Unit 7: The Business of Video Games	Lesson 1
(21) The student uses technology applications to facilitate evaluation of communication processes and products.			
(A) write technology specifications for planning/evaluation rubrics documenting variables, prompts, and programming code internally and externally.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 7: Testing, Testing 1, 2, 3	Lesson 3
(B) debug and solve problems using reference materials and effective strategies.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 7: Testing, Testing 1, 2, 3	Lesson 3
(22) The student understands technology concepts, systems, and operations as they apply to game programming.			
(A) identify basic game components, including the game engine, game play subsystems, data structures, models, and interfaces.	Foundations of Game Design 1a: Introduction	Unit 4 - Let's Talk Shop about Game Design	Lessons 1-3
(B) generate random numbers in a program.	Foundations of Game Design 1a: Introduction	Unit 3: A Peek into the Game Industry	Lesson 4

(C) create a program implementing conditional statements.	Foundations of Game Design 1a: Introduction	Unit 3: A Peek into the Game Industry	Lesson 4
(D) develop an appropriate data model.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 8: The Future of Gaming	Lesson 2
(E) demonstrate an understanding of and apply object-oriented game programming.	Foundations of Game Design 1a: Introduction	Unit 8: Let's Make a Game	Lesson 4
(F) demonstrate an understanding of game programming essentials, including event-driven programming, communicating with messages, and device management.	Foundations of Game Design 1a: Introduction	Unit 3: A Peek into the Game Industry	Lesson 4
(G) demonstrate an understanding of the role of game events, the animation loop, and game timing.	Foundations of Game Design 1a: Introduction	Unit 8 - Let's Make a Game	Lesson 4
(H) demonstrate an understanding of the role of game engines.	Foundations of Game Design 1a: Introduction	Unit 8: Let's Make a Game	Lesson 1
(I) apply basic game screen design and layout, including visual controls, user interfaces, menus, and options.	Foundations of Game Design 1a: Introduction	Unit 4: Let's Talk Shop about Game Design	Lesson 1
(J) use game control design to understand, access, and control input devices.	Foundations of Game Design 1a: Introduction	Unit 5: Accept the Mission	Lessons 1-5
(K) demonstrate an understanding of and apply game animation, including the principles of animation and frame-based animation.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 1: Get Artistic	Lessons 1-3
(L) demonstrate an understanding of game events, including listeners, triggers, and timed events.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 5: Accept the Mission	Lesson 2
(M) demonstrate an understanding of and implement collision detection, including models and sprite collisions.	Foundations of Game Design 1a: Introduction	Unit 6: Game Visuals	Lesson 3
(N) demonstrate an understanding of player progression, including leveling, linear progression, and maintaining high score data.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 5: Accept the Mission	Lesson 2
(O) demonstrate an understanding of algorithmic decision making.	Foundations of Game Design 1b: Storytelling, Mechanics, and Production	Unit 5: Accept the Mission	Lesson 2