

**2012/2013 DoDEA Student Competency Record**  
**Gaming Technology II**  
**CTI 402 - 18 weeks**

<b>Student</b>	<b>School Year</b>
<b>Grade</b>	<b>Term (fall, spring)</b>
<b>School</b>	<b>Teacher Signature</b>

**Major Concepts/Content:** The Gaming Technology II course teaches high school students the concepts and requirements for intermediate development of computer games. Students progress at their own pace while studying and performing tasks independently and in small groups. Lessons are delivered in an atmosphere of differentiated learning using hands-on activities. Learning is supplemented with demonstrations, lectures, and guest visits which supplement the concepts and application of gaming technologies. Students will gain first-hand knowledge by creating games that tie directly to the industry. Students will be introduced to and evaluated on all thirteen (13) DoDEA workplace readiness skills as they progress through this class

**Major Instructional Activities:** Within the parameters of this course student will be working in a cross curricular environment; performing and fine arts, computer programming, science, math, interactive multimedia, animation, technical writing, and audio engineering. Student centered learning will include problem solving, critical thinking, research, cooperative learning, through project based learning activities. It allows individual and group designed projects, software skill development, and culminates with a capstone project. The capstone project will be designed to simulate the industry work place by requiring the students to work in a team with a client and design a real world project. The content of these two courses will support STEM and Work Place Readiness Skills.

**Major Evaluative Techniques:** Students will demonstrate their knowledge through tests, hands-on demonstrations, technical reports, and projects.

CTI 402 18 weeks	Gaming Technology II <b>TASKS/COMPETENCIES</b>	
<b>Implement DoDEA's CTE Course Requirements</b>		
• 001	Demonstrate DoDEA's Workplace Readiness Skills in course activities.	
• 002	Student will discuss and sign a computer usage agreement.	
• 003	Students will demonstrate appropriate behaviors and safe practices in a computer lab.	
• 004	Identify Internet safety issues and procedures for complying with acceptable use	
<b>Advanced Game Engine Skills</b>		

• 005	Student will apply advanced character development, lightning, camera, and scene
• 006	Student will create advanced Objects and Collisions
• 007	Student will create advanced Particles and Effects
<b>Pre-production for Capstone Project</b>	
• 008	Students will develop their game concept, storyboards, rules, and other information in
<b>Advanced Expressions and Variables</b>	
• 009	Students will work within the parameters of the Game Engine creating and modifying
<b>Advanced Audio</b>	
• 010	Students will work within the parameters of the Game Engine creating and modifying
<b>Production for Capstone Project</b>	
• 011	Students will create a computer game using all pre-production elements and design
<b>Post-production for Capstone Project</b>	
• 012	Students will use peer to peer critique form to identify/recommend changes.
• 013	Students will modify/address recommendations provided by peer critique form.
<b>Introduction to Distribution of Game</b>	
• 014	Students will prepare their Capstone project for distribution