COURSE DESCRIPTION

Course Title: Middle School Game Design I - Introduction
Course Number: 10768
Course Prerequisites: none

Course Description: We all love to play video games – but have you ever wanted to build your own? If you are interested in a career in technology but also want a creative outlet, Game Design might be the field for you. Learn how to build a game from the ground up in Middle School Game Design 1, an interactive and hands-on course that will teach you all the ins and outs of making your own game. You will learn the importance of game structure and discover what makes a game fun, challenging, and interesting to players just like you. You will also have the opportunity to explore the design and creative process involved in game creation, learn block-based programs, and experiment with character and story development. As a bonus, you will leave the course with a digital portfolio of everything you created in class.

Suggested Grade Level: Grades 6-8
Length of Course: One Semester
Units of Credit: None
PDE Certification and Staffing Policies and Guidelines (CSPG) Required Teacher Certifications:
CSPG 65
To find the CSPG information, go to https://www.education.pa.gov/Educators/Certification/Staffing%20Guidelines/Pages/default.aspx
Certification verified by the WCSD Human Resources Department: ☒Yes   ☐No

WCSD STUDENT DATA SYSTEM INFORMATION

Course Level: Academic
Mark Types: *Check all that apply.*
    ☒F – Final Average   ☒MP – Marking Period   ☐EXM – Final Exam

GPA Type: ☐ GPAEL-GPA Elementary ☒ GPAML-GPA for Middle Level ☐ NHS-National Honor Society
    ☐ UGPA-Non-Weighted Grade Point Average   ☐ GPA-Weighted Grade Point Average

State Course Code: 05253
To find the State Course Code, go to https://nces.ed.gov/forum/sced.asp, download the Excel file for *SCED*, click on SCED 6.0 tab, and chose the correct code that corresponds with the course.

TEXTBOOKS AND SUPPLEMENTAL MATERIALS

Board Approved Textbooks, Software, and Materials:
  Title:
  Publisher: Edynamic Education
  ISBN #:   Virtual Coursework
  Copyright Date:
  WCSD Board Approval Date: 9/14/2020

Supplemental Materials:

Curriculum Document

WCSD Board Approval:
  Date Finalized: 8/12/2020
  Date Approved: 9/14/2020
  Implementation Year: 2020-2021

SPECIAL EDUCATION, 504, and GIFTED REQUIREMENTS

The teacher shall make appropriate modifications to instruction and assessment based on a student's Individual Education Plan (IEP), Chapter 15 Section 504 Plan (504), and/or Gifted Individual Education Plan (GIEP).

ASSESSMENTS

PSSA Academic Standards, Assessment Anchors, and Eligible Content: The teacher must be knowledgeable of the PDE Academic Standards, Assessment Anchors, and Eligible Content and incorporate them regularly into planned instruction.

Formative Assessments: The teacher will utilize a variety of assessment methods to conduct in-process evaluations of student learning.

  Effective formative assessments for this course include: Quizzes, homework, discussions

Summative Assessments: The teacher will utilize a variety of assessment methods to evaluate student learning at the end of an instructional task, lesson, and/or unit.

  Effective summative assessments for this course include: unit assessments and semester exams

Course Syllabus

MIDDLE SCHOOL Game Design 1a: Introduction

We all love to play video games – but have you ever wanted to build your own? If you are interested in a career in technology but also want a creative outlet, Game Design might be the field for you. Learn how to build a game from the ground up in Middle School Game Design 1, an interactive and hands-on course that will teach you all the ins and outs of making your own game. You will learn the importance of game structure and discover what makes a game fun, challenging, and interesting to players just like you. You will also have the opportunity to explore the design and creative process involved in game creation, learn block-based programs, and experiment with character and story development. As a bonus, you will leave the course with a digital portfolio of everything you created in class.

Unit 1: What's in a Game?

What's your favorite game? Even if you aren't much of a gamer, you might remember board games or outdoor games that you've played with your friends. Games have been with us ever since, well, since we've been human! You might think the bow and arrow in your video game is just a cool weapon to have in your arsenal. But going way, way back, people played archery games to see who was the best shot. Sometimes whole cities would play games to decide disagreements instead of going to war! Ever since the beginning, games have been a lot of fun, and so much more.

What will you learn in this unit?

- Define what a game is and explain how games are important to society
- Identify how simulations can be used to teach skills
- Analyze games for the four elements of game design
- Understand narrative and ludonarrative and how they relate to the storytelling aspect of games

Unit 1 Assignments

Assignment	Type
Unit 1 Text Questions	Homework
Unit 1 Lab 1	Homework
Unit 1 Lab 2	Homework
Unit 1 Activity	Homework
Unit 1 Game Journal Entry (Part 1 & 2)	Homework
Unit 1 Discussion 1	Discussion
Unit 1 Discussion 2	Discussion
Unit 1 Quiz	Discussion

Unit 2: Starting from Scratch

Why do some games hold our attention for hours, while others get boring after five minutes? We're going to look at how design elements like color and sound affect our mood as we play. We're also going

to look at the code blocks and instructions that make the game work. Get those creative brains firing on all cylinders because we are going to start building our own programs using Scratch!

What will you learn in this unit?

- Understand engagement and emotion and explain how they relate to game design
- Set up a backdrop and sound that creates a certain mood using Scratch
- Define sequence, loops, and conditional statements, and use them in Scratch to create a program
- Identify visual and sound elements that create the mood you would like to have in your game

Unit 2 Assignments

Assignment	Type
Unit 2 Text Questions	Homework
Unit 2 Lab 1	Homework
Unit 2 Lab 2	Homework
Unit 2 Activity	Homework
Unit 2 Game Journal Entry	Homework
Unit 2 Discussion 1	Discussion
Unit 2 Discussion 2	Discussion
Unit 2 Quiz	Discussion

Middle School Game Design 1a Midterm Exam

- Review information acquired and mastered from this course up to this point.
- Take a course exam based on material from the first two units in this course. (Note: You will be able to open this exam only one time.)

Midterm Assignments

Assignment	Type
Midterm Exam	Exam
Midterm Discussion	Discussion

Unit 3: Let's Get to Work!

So far, we've learned concepts about game design as well as what we can do in Scratch. Now it's time to connect those two and get to work! First, you'll explore conflict and how to apply it to different gameplay styles. Then you'll look at game mechanics and use them in Scratch to create certain aspects of games, like jumping and leveling up. And for the grand finale, you will make your very own shooter game!

What will you learn in this unit?

- Describe how certain game mechanics function in game design
- Create different levels in Scratch that could be used in a role-playing game
- Plan and produce a shooter game in Scratch

Unit 3 Assignments

Assignment	Type
Unit 3 Text Questions	Homework
Unit 3 Lab 1	Homework
Unit 3 Lab 2	Homework
Unit 3 Activity	Homework
Unit 3 Game Journal Entry	Homework
Unit 3 Discussion 1	Discussion
Unit 3 Discussion 2	Discussion
Unit 3 Quiz	Discussion

Unit 4: Time to Plan

So far, we've talked about how solid game mechanics, a unique narrative, and challenging opponents are all parts of making a great game. As important as these things are, the interface can make or break the player's experience. We will look at good practices for interface design and try some of them out in Scratch. You will also be starting your Game Design Document, where all of the elements of your game will finally come together in one big plan!

What will you learn in this unit?

- Explain what is meant by user interface and user experience
- Implement aspects of good interface design in Scratch
- Describe how the user interface can affect the user experience
- Create a Game Design Document

Unit 4 Assignments

Assignment	Type
Unit 4 Text Questions	Homework
Unit 4 Lab 1	Homework
Unit 4 Lab 2	Homework
Unit 4 Activity	Homework
Unit 4 Game Journal Entry	Homework
Unit 4 Discussion 1	Discussion
Unit 4 Discussion 2	Discussion
Unit 4 Quiz	Discussion

Middle School Game Design 1a Final Exam

- Review information acquired and mastered from this course up to this point.
- Take a course exam based on material from all units in this course. (Note: You will be able to open this exam only one time.)

Final Assignments

Assignment	Type
Final Exam	Exam
Class Reflection Discussion	Discussion