

GAMEMAKER PROGRAMMING I

Ms. Dombrowsky's Syllabus

MODULES

"Gaming" Learn to code by building and playing 2D games. GameMaker Studio, the 2D engine you'll be using, is based on a scripting language that builds techniques that can be transferred to other coding languages such as Python and Java. You will have the opportunity to express your creativity, art, design, problem-solving, and computational thinking skills to create games that can be played with friends and added to your digital portfolio.

Module 1 **Overview of Game Design and Computer Science Principles**

- *Getting Started, Introducing Game Design, Data and Computational Thinking, & The Internet and Global Impact*

Module 2 **Using GameMaker**

- *Setting Up GameMaker Projects, GameMaker Studio Interface, & Game Assets and GameMaker*

Module 3 **Zulama Pinball**

- *Game Design Documents, Parts of a GameMaker Game, Backgrounds and Rooms, Adding Code, & Complete Navigation Workshop*

Module 4 **Making the Game Work**

- *Controlling the Paddle, Using Mouse Input, Collision with Ball, & Adding More Assets*

Module 5 **Finishing Zulama Pinball**

- *Add Game Balance, Add Rewards, Player Feedback, Designing a Level, Final Playtest*

Module 6 **Ball Bouncer**

- *Rooms and Backgrounds, Ball and Wall Objects, Adding the Goal, Creating Playing Pieces Workshop*

Module 7 **Ball Bouncer Game Mechanics**

- *Placing the Pieces, Taking a Closer Look, User Interface, Global Variables, Adding a Power-Up, & On Your Own Workshop*

Module 8 **Matching Game**

- *Matching Game Setup, Card Sprites, & Controller Object*

Module 9 **Finding Matches**

- *Managing Variables, Gaming Timing, Randomizing the Game, Game Improvements, & Level Up*

Module 10 **Game Setup**

- *Setting Up Playing Board, For Loop, Arrays, Managing the Deck, More Scripts, Deal the Hand Workshop*

Module 11 **Build 31**

- *The Player's Turn, The Computer's Turn, End the Hand, Finish the Game*

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Projects: adombrowsky@go-efsd.net

WHAT TO EXPECT

Rubrics will be provided for most assessments and will be adapted to student needs. They will assess both the learning process and the final product.

Assessments

- ✓ **Bell Ringers**
- ✓ **Homework**
- ✓ **Quizzes/Tests**
Announced and Unannounced
- ✓ **Design Notebook**

Discussions

- ✓ **Online & In-Class**

WebQuests

- ✓ **Research**

Projects

- ✓ **Build & Create Games**
- ✓ **Play & Analyze Games**

Group Activities

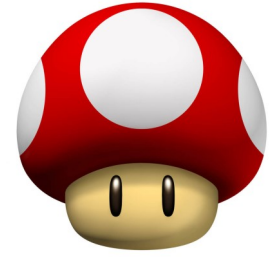
- ✓ **Paired Programming**



REQUIRED MATERIALS

Students should bring the following materials to class every day!

- iPad (provided by E.F.S.D.) with required apps installed.
 - Charged and ready to use.
- Pen or Pencil
- Students will be provide with an envelop to keep their classroom materials



WEBSITE



Passport Website:
[https://
 passport.emcl.com/](https://passport.emcl.com/)

REMIND

Mrs. Dombrowsky would like you to join remind
 Period 3!

To receive messages via text, text @308cd to 81010. You can opt-out of messages at anytime by replying, 'unsubscribe @308cd'.

Trouble using 81010? Try texting @308cd to (247) 880-2646 instead.

Or to receive messages via email, send an email to 308cd@gmail.com. To unsubscribe, reply with 'unsubscribe' in the subject line.



Text:

Period 2 @26f4c26

Period 3 @3g8cd9

Period 6 @27b3gc

Period 7 @bdh8a9

ACADEMIC INTEGRITY

- Ask for clarification when needed
- Manage your time & stay organized
- Take notes
- Iterate
- Do not aid and abet dishonesty
- Do not copy and claim another's work as your own
- Do not share your work
- Do not fabricate answers

MAKE-UP WORK AND ABSENCES

- If students know they are going to miss class they should get their assignments or make arrangements to take a test BEFORE they leave for the day.
- In addition, any homework due that day must be submitted BEFORE leaving.
- Students are expected to be prepared for class the next day.

Excused Absences

Students will have time equal to the length of their excused absence to make up work.

Unexcused Absences

Upon the second and subsequent unexcused/unlawful absences, any work submitted for the unexcused day will become a zero (0).

Tardiness to Class

After three offenses of arriving to class later than the beginning of class bell, detention will be assigned.

Class Cuts

Students absent from class in excess of ten minutes will be subject to disciplinary actions as outlined in Level II of the Student Behavior Code of Conduct.

REQUIRED APPS



Adobe



Canvas



Gmail



Google Drive



PicCollage



Venn

MAJOR TEST DAYS

Mondays & Wednesdays

**Students may be required to download additional apps throughout the semester.*

STUDENT EXPECTATIONS

- Be safe** Listen to staff. Maintain personal space.
- Respect others** Be on time. Be polite. Use appropriate language and tone.
- Accountable** Be prepared. Be honest. Do your own work. Use electronic devices only when permitted.
- Victorious** Do your best work. Celebrate academic success.
- Enthusiastic** Have a positive attitude. Take ownership of learning.